



Gray Davis
Governor



Cal/EPA

Winston H. Hickox
Agency Secretary

The Past & The Future

Major Accomplishments

1999 - 2003

CALIFORNIA
ENVIRONMENTAL
PROTECTION AGENCY
OFFICE OF THE
SECRETARY

DEPARTMENT OF
PESTICIDE REGULATION

DEPARTMENT OF
TOXIC SUBSTANCES
CONTROL

INTEGRATED
WASTE
MANAGEMENT
BOARD

OFFICE OF
ENVIRONMENTAL
HEALTH HAZARD
ASSESSMENT

STATE WATER
RESOURCES
CONTROL BOARD

AIR RESOURCES
BOARD



California Environmental Protection Agency

Office of the Secretary

Major Accomplishments 1999-2003

I. Major accomplishments of the last five years

- Children's Health – The Children's Health Program was created in the Office of the Secretary by statute in 1999. The program coordinates children's environmental health activities in the boards, departments, and office (BDOs) of Cal/EPA. The Office published the first biennial report in 2001, and the second report is due in December 2003.
- Environmental Justice – The Interagency Working Group (heads of the BDOs and Agency Secretary) accepted the report of the Environmental Justice Advisory Group on October 14, 2003. The report of the advisory group provides a framework for the individual BDOs to develop a strategy for enhancing their environmental justice policies.
- Border Program – The Office has signed a number of cooperative agreements and memorandums of understanding with States in Mexico. The program has been instrumental in coordinating cross media issues within Cal/EPA and with other states in both the United States and Mexico. These agreements have involved strategic planning, and programs dealing with air, water and waste.
- Consolidated Enforcement – Two reports have been issued detailing the accomplishments of the consolidated enforcement program headed by the Office of the Secretary. The focus of the program has been on the basic need for a consistent and coordinated cross media approach to environmental enforcement. To that end, the office has developed environmental enforcement training, case investigation, development and coordination with the BDOs, state, local and federal environmental prosecutors.
- Physical Relocation – The Office of the Secretary and the headquarters of the BDOs were relocated to the Joe Serna Jr. Cal/EPA headquarters building about three years ago, improving all cross media efforts. Approximately 3,000 state employees work in the building.
- IDEA Project – USEPA has provided significant grant funding to Cal/EPA to work on the development of California participation in the National Environmental Information Network. The project's goal is to develop a way to share data electronically between the federal, state, and local governments.
- EPIC – Publication of the first Cal/EPA report on Environmental Protection Indicators occurred in 2002. Efforts are under way to pilot projects in each of the organizations to specifically measure program outcomes.
- CUPAS – Created 82 new local hazardous waste and underground storage tank programs statewide and increased, by tenfold, compliance with environmental regulations. Established one-stop permitting process for hazardous materials and reduced business reporting requirements.

II. Initiatives still in the implementation phase

- Sustainability – Several projects dealing with cross media issues are under way within Cal/EPA to demonstrate the applicability of sustainability concepts to address environmental regulatory problems.
- Brownfields – The Office continues to work closely with the Department of Toxic Substances Control and other related departments in the development of the Brownfields Program. A draft legislative proposal is being circulated that would enable more Brownfields to be cleaned up and redeveloped. Also, the Agency is moving forward to establish the Financial Assurance and Insurance for Redevelopment Program to provide affordable environmental insurance to brownfields developers as called for in statute.
- Perchlorate Cleanup – Cal/EPA is coordinating statewide cross media efforts to investigate and address perchlorate contamination, including working with the military and the USEPA.

III. New initiatives created by legislation to go into effect on January 1, 2004

- Environmental Education – Legislation has directed the California Integrated Waste Management Board and Cal/EPA to implement statutory mandates that provide for incorporation of environmental concepts into state textbook adoption criteria and to coordinate all state agency environmental education programs.

IV. Unaddressed environmental threats

These issues are covered in the individual BDO writeups.

Air Resources Board

Major Accomplishments 1999-2003

I. Major accomplishments of the last five years

AIR POLLUTION CONTROLS

- Portable Gas Cans. April 1999 - ARB adopted a regulation requiring that new portable fuel containers used to refuel lawn and garden equipment, motorcycles, and watercraft be spill-proof beginning in 2001.
- Consumer Products. October 1999 - ARB adopted regulation to reduce emissions from caulking compounds and tire sealants. ARB also tightened existing standards for 15 additional consumer product types.
- MTBE Phase-Out. December 1999 - ARB amended existing gasoline regulation to eliminate methyl tertiary butyl ether (MTBE) consistent with Governor Davis' Executive Order, and made other conforming changes to preserve the air quality benefits of cleaner burning fuel. In July 2002, ARB extended the MTBE phase out date until December 31, 2003 to avoid gasoline supply disruptions and related price spikes.
- Off-Road Diesel Equipment. January 2000 - ARB adopted more stringent emission standards for off-road diesel engines.
- Urban Transit Buses. February 2000 - ARB adopted transit bus fleet rule to reduce emissions from existing buses, set tighter standards for new buses, and introduce zero-emissions buses by the end of this decade.
- Enhanced Vapor Recovery at Gas Stations. March 2000 - ARB adopted measures to further reduce gasoline vapors that are released when customers fuel their personal vehicles at retail service stations.
- Smoke Management. March 2000 - ARB adopted regulations to protect communities from the health impacts of managed crop and forestry burning.
- Automotive Care Products. April 2000 - ARB approved nation's first air toxics control measure to eliminate perchloroethylene, methylene chloride and trichloroethylene in automotive products such as brake cleaners and degreasers.
- Paints and Coatings. June 2000 - ARB approved a model rule for architectural coatings with the nation's most advanced emission limits, for use by local air districts. The model rule also included detailed environmental and economic analysis to streamline the local adoption process.
- Asbestos. July 2000 - ARB tightened an existing rule to prohibit the use of asbestos-containing rock on unpaved roads and to reduce allowable asbestos content for road surfacing materials. In July 2001, ARB adopted a companion rule requiring dust mitigation for construction and grading operations, road construction and maintenance activities, and quarries and surface mines to minimize emissions of asbestos-laden dust.

- Inboard and sterndrive marine engines. July 2001 - ARB strengthened its emission standards for inboard and sterndrive gasoline-powered engines in recreational marine vessels, to take effect in 2003.
- Automotive coatings. September 2001 - ARB adopted an air toxics control measure prohibiting the sale and use in California of automotive coatings that contain hexavalent chromium or cadmium.
- Heavy-duty diesel trucks. October 2001 - ARB adopted lower emission standards for new heavy-duty diesel truck engines starting in 2007, which will reduce truck emissions by 90 %.
- Residential burning. February 2002 - ARB adopted a measure to reduce toxic air contaminant emissions by banning burn barrels and the outdoor burning of residential waste materials other than natural vegetation.
- On-Board Diagnostics for Cars. April 2002 - ARB amended its on-board diagnostics (OBD II) regulation to improve the effectiveness of computer systems in detecting motor vehicle emission-related problems.
- School Bus Idling. December 2002 - ARB adopted a measure requiring school bus drivers to turn off vehicle engines upon arrival at school and to restart no more than 30 seconds before departure to limit children's exposure to toxic diesel particulate exhaust.
- Zero Emission Vehicles. April 2003 - ARB updated California's landmark ZEV regulation to support fuel cell car development and to expand sales of advanced technology (like gasoline-electric hybrids) in the near-term, while still retaining a role for battery electric vehicles.
- Small Off-Road Equipment. September 2003 - ARB adopted more stringent emission standards for lawn, garden and industrial equipment, such as string trimmers, leaf blowers, walk-behind lawn mowers, generators, and lawn tractors.

ACTIONS TO REDUCE DIESEL RISK

- Diesel Risk Reduction Plan. September 2000 - ARB adopted a comprehensive plan to reduce toxic particulate emissions from diesel engines by 85% through three main strategies: retrofit or replacement of existing engines, tighter standards for new engines, and cleaner diesel fuel.
- Clean Diesel Fuel. July 2003 - ARB adopted a regulation to reduce diesel sulfur levels to 15 parts per million for all diesel fuel used in vehicles and off-road equipment in California, beginning in 2006.
- Solid Waste Collection Vehicles. September 2003 - ARB adopted a regulation to reduce diesel emissions from solid waste collection vehicles by over 80% by 2010.
- Incentive Programs. Over last five years, with the Carl Moyer Program, ARB has provided more than \$100 million in grants to fund the incremental cost of cleaner-than-required engines and equipment to replace older, diesel engines.

CHILDREN'S HEALTH

- Particulate Matter Standards. In June 2002, ARB adopted a new California ambient air quality standard for PM_{2.5} and strengthened the existing PM₁₀ standard to provide greater health protection for children.
- Children's Health Study. Over the last five years, ARB has continued on with its 10-year Children's Health Study which is following 4,000 children in Southern California to determine whether growing up

in high air pollution areas causes long-term health impacts. Findings thus far indicate that children in high pollution areas have slower lung growth, lower lung function, increased asthma attacks, and higher school absences than children in cleaner areas.

- Fresno Asthmatic Children's Environmental Study (FACES). In 2000, ARB initiated a 5-year study to evaluate the impact of air pollution on asthmatic children. Air pollution aggravates asthma; this study is to determine whether it also causes asthma to occur and what the underlying mechanisms are.
- Air Monitoring. June 2003 - ARB reported on the adequacy of California's air monitoring network to measure infants and children's exposure. The report found the existing network adequate for regional assessments, and identified supplemental approaches to better characterize neighborhood exposures.
- Cleaner School Buses. Governor Davis' FY 2000-2001 budget included \$50 million to reduce children's exposure to air pollution emitted by diesel school buses. Under guidance adopted by ARB, school districts will use these funds to replace 360 high-polluting buses with new, cleaner diesel or alternative fuel buses, and to add filters that reduce diesel particles on 2,000 additional buses.
- Portable Classrooms: June 2003 - ARB and the California Department of Health Services released a joint report on environmental health conditions in portable classrooms. The report identified several issues (mold, noise, elevated formaldehyde) and made recommendations for improvement.

ENVIRONMENTAL JUSTICE

- Policy Document. December 2001 - ARB approved its *Environmental Justice Policies and Actions* to establish a framework for incorporating environmental justice into ARB programs.
- Neighborhood Assessments. In 1999, ARB initiated a Neighborhood Assessment Program to address concerns about disproportionate air pollution impacts. ARB has conducted special air monitoring in several communities and is developing the scientific, technical and analytical tools to assess cumulative air quality impacts.
- Public Participation Guidebook. In January 2003, ARB released *Let's Clear the Air—A Public Participation Guide to Air Quality Decision Making in California*. This document is intended to help people participate in the air quality decision-making process in California at both the State and local levels.
- Hewlitt Foundation Fellow. In 2003, the Hewlitt Foundation initiated and fully funded a one-year fellowship at the Air Resources Board in the area of environmental justice.

CALIFORNIA-MEXICO BORDER

- Heavy-Duty Vehicle Inspections. ARB inspects heavy-duty vehicles at the Otay Mesa and Calexico international ports of entry to ensure that foreign and commercial vehicles operating within California meet the State's safety and pollution standards.
- Tijuana Smog Check Pilot Project. With Cal/EPA, the Bureau of Automotive Repair (BAR), and the City of Tijuana, ARB helped develop a pilot vehicle emissions inspection program for Tijuana. The city's first Smog Check station was inaugurated July 2003.
- Border Power Plants. As new power plants are built in the U.S.-Mexico border region, ARB has worked with industry and government agencies to encourage the use of best available control technology to minimize the cross-border environmental impacts of new facilities.

- Border Air Monitoring Program. ARB helps oversee a 15-station air quality monitoring network in the California-Mexico border region.

POWER PLANT EMISSION REDUCTIONS

- Power Plant Permitting Guidance. In July 1999, ARB established guidance for permitting power plants to ensure that they use the most effective emission control technology to minimize air quality impacts.
- Implementing Governor Davis' Executive Orders. In February 2001, Governor Davis signed five Executive Orders to increase generating capacity at existing power plants, accelerate power plant construction, and streamline review process for new plants. ARB worked with local air districts and the California Energy Commission to implement the Executive Orders, including assisting air districts as they modify permit conditions, and developing criteria for a State Emissions Credit Bank to provide offsets for peaker power plants.
- Distributed Generation. In November 2001, ARB adopted emission standards and certification requirements for small distributed power generation units that produce electricity at the site of use.

II. Initiatives still in the implementation phase

STATE IMPLEMENTATION PLANS (SIPs)

- South Coast Plan. In the 2003 SIP for the South Coast AQMD, ARB is committing to adopt 20 new control measures for on- and off-road motor vehicles, consumer products, fuels, and fueling operations to improve air quality statewide. These commitments define much of ARB's regulatory calendar between 2003 and 2006.
- South Coast SIP Settlement. In July 2003, ARB reached a settlement with the Natural Resources Defense Council, et al, regarding failure to achieve certain commitments in the 1994 federally approved plan for the South Coast AQMD. The settlement requires ARB to consider for adoption, by fixed deadlines, twenty-two emission control measures. The settlement also requires that a fixed amount of emission reductions be achieved each year between 2003 and 2008, by whatever means ARB determine to be feasible and cost-effective.
- Long-Term Strategy. In addition to the 20 defined measures in the South Coast SIP, ARB is responsible for assuring that the 2010 federal attainment deadline for the 1-hour ozone standard is achieved. By 2007, ARB and other responsible agencies must come up with measures sufficient to reduce approximately 200 tons per day of reactive organic gases and 100 tons per day of nitrogen oxides in the South Coast Air Basin.
- San Joaquin Valley and Sacramento Metropolitan Area. These two air districts are on the brink of being "bumped up" from severe to extreme for their anticipated failure to attain the federal ozone standard by 2005. If bump-up occurs, new SIPs with new control measures will be needed to demonstrate attainment by the later 2010 deadline.
- Transportation Conformity. More than 20 air districts in California must update their air quality plans to reflect the most current vehicle emissions inventory data, and to assure ongoing conformity with the applicable regional transportation plan.

- Air Pollution Transport to Downwind Areas. State law requires that upwind districts mitigate the impact of their emissions on downwind areas. ARB is responsible for enforcing that requirement. ARB has adopted transport mitigation regulations for this purpose. Affected stakeholders now want those control measures incorporated into federal SIPs as well, so that the compliance of upwind areas is doubly assured. This issue will be prominent in the April 2004 revision to the San Francisco Bay Area plan, since Bay Area emissions affect the broader Sacramento area, northern San Joaquin Valley, and Monterey Bay districts.

DIESEL RISK REDUCTION

- Diesel Risk Reduction Measures. Between 2003 and 2006, as part of its Diesel Risk Reduction Plan, ARB plans to adopt measures to reduce toxic diesel particulate emissions from on-road and off-road diesel vehicles, stationary diesel engines, and portable diesel engines.

GREENHOUSE GAS EMISSIONS

- Technical Information on Greenhouse Gas Emissions. ARB is continuing to develop emission inventory and evaluation potential control strategies to support its development of regulations to control climate change emissions from automobiles. As part of this effort, ARB hosted an International Technology Symposium in 2003 to gather and share information about technologies to reduce global climate change emissions from motor vehicles.
- Regulations to Reduce Greenhouse Gas Emissions from Motor Vehicles. Under State law, ARB is required to adopt, by January 1, 2005, regulations for model year 2009 and later vehicles sold in California, to reduce the emissions that contribute to climate change. That regulatory hearing is tentatively scheduled for September 2004.
- Litigation. ARB anticipates extensive litigation over California's statute requiring greenhouse gas control. The Office of the State Attorney General is working closely with ARB to prepare the State's defense in advance. In addition, the AG's Office will be filing its own suit against the U.S. Environmental Protection Agency recent policy decision *not to regulate* greenhouse gases. The latter is necessary to correct what the AG and ARB both believe is a mischaracterization of the intent and scope of the federal Clean Air Act and Energy Act.

ZERO EMISSION TECHNOLOGY

- Fuel Cell Vehicle Development. ARB is a founding member and continues to be active in the California Fuel Cell Partnership—a collaboration of auto manufacturers, fuel cell developers, fuel providers, and other government agencies—to demonstrate the viability of fuel cell vehicles, increase public awareness, and explore how best to commercialize fuel cell technology.
- Stationary Source Fuel Cell Development. ARB is a founding member and continue to support the Stationary Fuel Cell Collaborative, which will fund pilot projects, facilitate the siting of fuel cells in California, adopt and implement policies for use of fuel cell in distributed generation, and promote fuel cell education and outreach.

ENVIRONMENTAL JUSTICE

- Guidance for Local Agencies. In 2004, ARB will develop the *Air Quality Handbook*, a guidance document for local decision-makers on cumulative impacts from air pollution to improve local land use decisions and reduce or prevent future problems.

- Web-Based Information System. In late 2003/early 2004, ARB will release its Community Health Air Pollution Information System, which will enable those with internet access to look up emissions for their community.
- Neighborhood Reports. In 2004, ARB will send final reports to the six communities evaluated in the Neighborhood Assessment Program: Boyle Heights, Fruitvale, Wilmington, Barrio Logan, Fresno, and Crockett summarizing ARB's findings.

ENVIRONMENTAL TOBACCO SMOKE (ETS)

- Toxic Air Contaminant Listing. In 2000, ARB and the Office of Environmental Health Hazard Assessment began a multi-year process to evaluate ETS for possible identification as a toxic air contaminant. A draft assessment describing the health effects of secondary tobacco smoke is nearing completion and will soon go to the State's Scientific Review Panel for its review. The panel's comments will be incorporated into a final draft, which will be circulated for public comment, be amended again, and then go before the full Air Resources Board for review. If ARB decides to list ETS as an toxic air contaminant, the next step is initiation of a risk management phase where all feasible and cost effective control measures (such as further restrictions on smoking in public places) must be considered.

III. New initiatives created by legislation to go into effect on January 1, 2004

- AB 998, Lowenthal (Chapter 821, Statutes of 2003) Imposes a \$3/gallon fee (increasing \$1 annually, capping at \$12 in 2013) on perchloroethylene to fund a demonstration and grant program, administered by ARB, for non-toxic and non-smogforming alternatives to perchloroethylene used in dry cleaning. (Effective January 1, 2004)
- SB 288, Sher (Chapter 476, Statutes of 2003) Preserves local air districts' New Source Review permitting programs as in place on December 30, 2002, and prohibits districts from modifying those programs without ARB's approval at a noticed public hearing. (Effective January 1, 2004)
- SB 656, Sher (Chapter 738, Statutes of 2003) Requires the ARB to adopt a list of cost-effective particulate matter control measures by January 1, 2005 and an implementation schedule for those measures by July 31, 2005. (Effective January 1, 2004)
- SB 700, Florez (Chapter 479, Statutes of 2003) Removes the longstanding statutory exemption for agricultural sources from permitting and other regulatory requirements. Also requires the ARB to adopt a definition of a "large confined animal operation," so that permits and best available management practices may be applied to those sources. (Effective January 1, 2004)

IV. Unaddressed environmental threats

- Emissions from Federal Sources. Emission sources under the exclusive legal or practical control of the federal government account for over one-quarter of all NOx emissions and almost two-thirds of all diesel particulate matter in California. U.S. EPA has done an excellent job in adopting controls for new vehicles (gasoline and heavy-duty diesel). However, aircraft, locomotives and marine vessels are still relatively unregulated. Also, the existing stock on heavy-duty diesel engines needs to be turned

over as rapidly as possible. For California to meet health-based air quality goals, U.S. EPA needs to pursue new control requirements for these sources and complement them with financial incentives to speed turnover of the diesel fleet to cleaner engines.

- Indoor air pollution. Available data suggest that indoor air pollution may be as damaging to public health as the outdoor pollutants California has spent the last 50 years regulating. In 2002, the Legislature considered a major bill to initiate an indoor air quality control program (AB 1173, Keeley). That bill turned into a study measure instead, with results due in 2004. Pressures to regulate indoor air quality will reemerge once the new study is completed.
- Naturally occurring asbestos. Although the ARB has adopted several measures to control asbestos laden dust, concerns remain about exposures to homeowners who live in asbestos-rich areas, most notably in El Dorado County. Activists are pushing for a no further growth outcome. In addition, U.S. EPA and other federal agencies are complicating the issue by comparing asbestos rock dust to extensive mining-related asbestos pollution that exists in Libby, Montana (a comparison that California health officials contend is exaggerated). There is no simple solution to this problem beyond public education and what the State has already done.

Department of Pesticide Regulation

Major Accomplishments 1999-2003

I. Major accomplishments of the last five years

- **Enforcement** – In conjunction with the County Agricultural Commissioners (CACs), DPR conducted an enforcement initiative to review and strengthen the statewide field enforcement program. DPR and the Counties adopted a new annual work planning and performance review process, including specific measurements that relate to public health, occupational safety and environmental quality.
- **Industry Compliance** – DPR conducted an independent audit of industry compliance in 20 counties, to evaluate the performance of growers, applicators, handlers and other pesticide users in meeting worker protection requirements. CACs in counties in which industry failed to meet at least an 80% compliance rate developed and implemented workplans to improve industry oversight. DPR continues to assess industry performance in 3-5 counties per year.
- **Risk Assessment** – By 2003, DPR had completed risk assessments of 118 high-priority pesticides. During this time period, over 2/3 of the pesticide products used in California (on a pounds used basis) had been assessed and regulated to prevent adverse impacts on public health or the environment.
- **Pesticide Product Registration** – DPR established a joint planning effort with the U.S. EPA to define annual targets for assessing new pesticide products proposed for registration in the U.S. and California. DPR also instituted a workload sharing program with EPA to conduct portions of the scientific review process, to expedite decisions on products that are important for pest control on crops grown in California. DPR also invigorated its reevaluation process, requiring additional environmental assessment and controls on methyl bromide, diazinon, and other widely-used pesticides in California.
- **Business Process Improvements** – DPR used a management consulting firm to assist it in doing a complete review of five of its principal business processes (permitting and enforcement, product registration, licensing and certification, pesticide use reporting and mill assessment). DPR completed short-term solutions and initiated long-term fixes to problems identified. DPR also completed a readiness assessment and implementation plan for delivering services via the internet.
- **Performance-Based Management** – DPR conducted comprehensive cost analyses of all of its operations and is in the process of revamping its accounting system to track and manage costs on an hourly basis. DPR has instituted quarterly performance tracking, using its annual workplan and production targets, which will be linked to its new cost accounting system in 2004. The information generated by this management system will allow DPR to refine its annual budget and fee structure to accurately recover costs associated with registration, licensing and other activities.
- **Methyl Bromide** – DPR adopted new regulations in 2001 to protect workers and residents near methyl bromide applications from unacceptable acute (daily) exposures to methyl bromide. DPR proposed new regulations in 2003 to expand these protections to cover seasonal exposures (between one day and two months) of workers and residents to methyl bromide. Monitoring data from 2000-02 in the highest-use areas in California indicate that ambient concentrations of methyl bromide do not exceed health-protective levels, and the new regulations will ensure that any changes to methyl bromide use will continue to meet these health protection levels.

- Fumigants – DPR and the CACs have implemented a comprehensive strategy to evaluate and regulate the use of fumigants in California, not only to protect public health, but also to assist growers and pesticide manufacturers to plan for pest control needs. DPR and the CACs are implementing various outreach efforts to assure that growers can use effective control products for soil-born pests that meet health protection requirements. Monitoring, risk assessment and control measure development activities are continuing for methyl bromide, chloropicrin, methyl isothiocyanate, 1,3-dichloropropene and sulfuryl fluoride.
- Pesticides in Air – in 2002, DPR and other state and local agencies completed the first comprehensive assessment in California of pesticides and breakdown products that could pose potential health problems to people through exposure via air. The project monitored 31 chemicals and found that there were detectable concentrations in air for some of the chemicals, but none approached levels of health concern. This project confirms that DPR's scientific evaluation and environmental modeling activities of airborne pesticides protects the health of workers and residents from this exposure pathway.
- Pesticides in Groundwater – in 2003, DPR proposed new regulations that change its approach from responding to pesticide finds in groundwater to requiring the use of preventative practices in areas of potential contamination. The new regulations establish groundwater protection areas that cover 2.4 million acres of California farmland, in which various management practices are required before any of the 7 chemicals on DPR's groundwater contaminant list can be used.
- Pesticides in Surface Water – In conjunction with the CACs, DPR established a program to evaluate and respond to pesticides found in surface waters. DPR and the CACs are assisting the State and Regional Water Quality Control Boards in developing total maximum daily loads for water contaminants. DPR and the CACs have taken the lead in identifying the sources of pesticides that violate water quality standards, as well as measures to control these discharges so that the environment is not adversely affected. DPR has proposed regulations to prevent the drift into water or runoff of pesticides that are used during the dormant season in orchards in the Sacramento and San Joaquin Valleys, which is a major source of pesticide contamination in those watersheds.
- Reduced Use of High Risk Pesticides – DPR issued over \$8 million in grants to growers, applicators and researchers participating in 241 projects to develop, demonstrate and deploy new pest control techniques that reduce the use of high risk pesticides. Partly as a result of these efforts, the use of pesticides in California dropped by 25%, and pesticides classified as possible carcinogens, reproductive toxins and toxic air contaminants all showed declines in use.
- Pesticide Information – in 2003, DPR unveiled the California Pesticide Information Portal, a web-based database with graphical user interface that links the DPR pesticide use report database to its label database and toxicity databases. People can search these databases any hour of the day, with a user-friendly search engine, to find what pesticides have been used in any location in California, the toxicity of those pesticides, and the label requirements that regulate the use of these pesticides.
- Online Licensing – DPR and the CACs launched an online licensing system to allow businesses in the pest control industry to initiate or renew their business licenses online.
- School IPM – In 2001, DPR launched a website and training program to provide information to parents, teachers, school administrators and pest control officials in schools on integrated pest management (IPM). The IPM program promotes the use of alternative pest control methods that are potentially less toxic than conventional pesticide uses. DPR developed and distributed an IPM manual to school districts in California, to assist them in using these alternative control methods.

II. Initiatives still in the implementation phase

- Performance-Based Management – DPR will revise its accounting systems in 2004, to track and manage costs on an hourly basis. DPR will link its quarterly performance tracking and annual workplan and production targets to this new cost accounting system.
- Pesticide Information for Workers – DPR and the CACs have been working with industry and farmworker representatives for over three years to identify the reasons for high pesticide exposure and illness rates in certain agricultural situations in California. DPR will propose in 2004 new regulations to provide notification to workers of pesticide uses in nearby fields, including re-entry restrictions and links to toxicology data.
- Online Licensing – DPR is currently conducting a feasibility study of an online licensing system for all of its licensees in the pest control business (applicators, pest control advisors, maintenance gardeners, etc.) Based on the results of this feasibility study, DPR will proceed in 2004 to design and procure the hardware and software necessary to implement this system.
- Methyl Bromide – DPR will finalize new regulations concerning seasonal exposures (between one day and two months) of workers and residents to methyl bromide. Litigation concerning the health protection levels chosen by DPR and control measures for methyl bromide contained in the regulations is expected.
- Pesticides in Air – DPR will complete its portion of the San Joaquin Valley state implementation plan for control of VOCs from pesticide uses. In 2004 and beyond, DPR will develop and implement control measures that meet cost-effectiveness criteria established by the ARB and the San Joaquin Valley AQMD.
- Pesticides in Groundwater – DPR will finalize the new regulations proposed in 2003.
- Pesticides in Surface Water – DPR will finalize the proposed regulations to prevent the drift into water or runoff of pesticides that are used during the dormant season in orchards in the Sacramento and San Joaquin Valleys.

III. New initiatives created by legislation to go into effect on January 1, 2004

- Chapter 741, Statutes of 2003 (SB 1049) - Provides for new and increased fees in the area of natural resources and environmental protection to provide support for various departments. For the Department of Pesticide Regulation this bill provides authority for the Director to set licensing, examination, and registration fees by regulations to cover the costs of those activities; and to set the mill assessment rate of up to 21 mills per dollar of sales to support DPR's annual expenditures authorized in the annual Budget Act and provide a prudent reserve. DPR has released emergency regulations to implement this statute in time for the 2004 renewal cycle.

IV. Unaddressed environmental issues

- Pesticide Drift – U.S. EPA and DPR had begun two years ago to develop and adopt standards for the offsite movement of pesticides. EPA proposed a definition of drift that did not appear to be enforceable, and retracted its proposal in the face of significant opposition. EPA is still formulating its plan, but the issue still centers on the definition of acceptable levels of risk associated with offsite movement of pesticides.
- Genetically-Modified Organisms – California needs to coordinate its state agencies to promote the benefits and control the risks associated with the use of biotechnology in agriculture. Currently, significant amounts of misinformation are being distributed to the public by anti-biotech organizations that are not being evaluated or countered by science-based agencies.
- Cumulative Risk – The science of assessing the toxicity mechanisms and synergistic or antagonistic effects of exposures to multiple environmental stressors needs to be improved, to determine the magnitude of such cumulative risks to humans and other organisms.
- Relative Risk – Environmental regulatory agencies should conduct a broad-ranging evaluation of environmental and public health risks, to provide context to future decisions on investment in environmental protection measures, and to provide a foundation for a risk communication effort to assist the legislature, regulated community and members of the public to decide on the appropriate priority for expenditure of public and private funds.

Department of Toxic Substances Control

Major Accomplishments 1999-2003

I. Major accomplishments of the last five years

BROWNFIELDS AND OTHER PROPERTY REUSE

- Brownfields: Under DTSC oversight, 500-plus contaminated urban sites were cleaned and returned to productive use, a handful of those demonstrating the viability of an innovative loan program. Also, with more than 300 in place, DTSC is a national leader in requiring land use covenants on non-residential properties on which contamination remains after cleanup.
- Military base cleanup: DTSC is actively engaged at 170-plus open and closed military bases, and has facilitated “early transfer” of 54,000 acres on a dozen of those bases, more than anywhere in the nation. DTSC is nationally recognized for its expertise with unexploded ordnance left on military sites.
- Drug lab and emergency cleanups: Since 1996, DTSC responded to more than 14,000 clandestine drug labs and 1,000 emergencies involving hazardous waste.

CHILDREN’S HEALTH

- Schools: In addition to clearing 1,200 new State-funded sites for school construction, DTSC oversaw cleanups at 55 existing schools, at which children ran a risk of direct exposure to hazardous substances.

PUBLIC HEALTH

- Targeted regulatory focus: DTSC implemented new standards for mercury in consumer products, particularly fluorescent light tubes, and determined that computer monitors and the like are hazardous waste that should be handled as are other relatively low-threat “universal” wastes. Also, the independent work of DTSC scientists led to California being the first to ban certain flame retardants.
- Environmental Indicators: In 2003, DTSC met the 2005 U.S. EPA Environmental Indicators goals for permitting decisions, and the 2003 goals for protecting human health at groundwater-contaminated facilities.
- Anti-terrorism: DTSC eliminated the potential for terrorist access to explosives and munitions by closing down and cleaning up a facility handling those items illegally. To be ready to respond in an attack, DTSC strengthened the physical security of its offices and implemented office emergency response plans to ensure rapid business resumption of essential functions.

ENVIRONMENTAL ENFORCEMENT

- Environmental crimes: Resolving cases at the rate of 1 every 10 working days, DTSC investigations brought 32 criminal convictions, with jail or prison and probation sentences totaling 99 years including --

at 17 years -- the longest sentence given for an environmental crime. DTSC also eliminated a 73 case backlog, collecting \$10 million in penalties.

- Deterrence: DTSC developed regulations to provide consistency in State and local penalty calculations, which also serve to put businesses on notice about the possible fines associated with violations.
- Enforcement initiatives: In addition to coordinating with county and regional environmental task forces to eliminate duplicative efforts, DTSC launched enforcement initiatives addressing dairies, radiator shops, roofing tile manufacturers, powder coaters, grease haulers, and large appliance disposal.

POLLUTION PREVENTION

- Pollution prevention: DTSC delivered a vehicle service and repair outreach program to 2,500 garages, from small shops to AAA, NAPA Auto Parts, Ford, Honda, and government garages, helping them both save money and reduce the amount of hazardous waste they generate.
- Technology development: DTSC certified 34 environmental technologies.

GOOD GOVERNMENT

- Interagency coordination: DTSC initiated contact and formed a working group with the State Water Resources Control Board to clarify respective roles and develop means of expeditiously resolving disputes.
- External relations: DTSC launched a California portal-compliant and accessible website containing many non-English documents. DTSC also developed an internal guide for “plain language” writing. And almost 100 DTSC staff members participate in school mentoring at schools near DTSC’s offices statewide.
- Leadership Development: Rotated all division chiefs, providing cross-program fertilization and broadening. Also enacted DTSC’s leadership academy, training 20 managers per year.

II. Initiatives still in the implementation phase

BROWNFIELDS AND OTHER PROPERTY REUSE

- Brownfields: DTSC will pursue regulatory and legislative initiatives to streamline the urban site cleanup process and provide more assistance to those seeking to redevelop brownfields properties, including launching a Financial Assurance and Insurance for Redevelopment (FAIR) program to address liability issues.
- Military base cleanup: DTSC will fill a regulatory vacuum by proposing regulations describing the investigative and response processes for sites known as or suspected of containing unexploded ordnance or munitions.

PUBLIC HEALTH

- Targeted regulatory focus: DTSC will reevaluate the hazardous waste standards for lead-containing wastes.

- Treated wood waste: Industry-wide treated wood variances issued in the 1980s exceed DTSC's statutory authority. As part of rescinding these variances, DTSC will need to work out environmentally responsible alternatives for this waste.

ENVIRONMENTAL ENFORCEMENT

- Enforcement initiatives: DTSC will launch an initiative to address the hazardous wastes generated by the cruise ship industry.

POLLUTION PREVENTION

- Technology development: DTSC will demonstrate the environmental benefit and cost savings of high-efficiency motor oil filtration devices on a state fleet.

III. New initiatives created by legislation to go into effect on January 1, 2004

PUBLIC HEALTH

- AB 302 (Chan, Ch. 205): DTSC will make a determination as to whether certain flame retardants (pentabrominated diphenyl ethers or octabrominated diphenyl ethers), ban effective Jan 1, 2008, should be considered hazardous for the purpose of waste management.
- AB 826 (Jackson, Ch. 608 - Perchlorate Contamination Prevention Act): DTSC will develop standards for handling perchlorate (used in rocket fuel) and will establish a statewide database for collecting hazardous materials data from local agencies.

POLLUTION PREVENTION

- SB 20 (Sher, Ch. 526): DTSC and the California Integrated Waste Management Board will implement the Electronic Waste Recycling Act, which provides funding for collecting and recycling discarded computer monitors and televisions. The statute also bans sales, and establishes control, on certain monitors and televisions.

GOOD GOVERNMENT

- AB 1700 (Laird & Wiggins): Prohibits the State from eliminating certain specially funded staff positions at DTSC.

IV. Unaddressed environmental threats

BROWNFIELDS AND OTHER PROPERTY REUSE

- Site cleanup: Cleanups conducted by other agencies in which contamination is left in place without record or land use restrictions fail to protect future site owners and occupants; cleanup of residuals from clandestine drug laboratories; and cleanup after DTSC's emergency "midnight removals".

- Military base cleanup: The U.S. Army Corps of Engineers lacks funding to address California's 1,000-plus formerly used defense sites, some of which present threats to human health and the environment, including the presence of unexploded ordnance.

CHILDREN'S HEALTH

- Schools: Existing school sites built on or adjacent to known contaminated properties should have environmental assessments conducted on them to evaluate risks to school children.

PUBLIC HEALTH

- Targeted regulatory focus: Make hazardous waste determinations about additional consumer electronic products. Regulate flame retardants and other persistently biologically accumulative chemicals.
- Pyrotechnics: The issue of wastes generated by manufacturing, using, and disposing of fireworks is largely unexplored as is the fact that the preferred disposal involves open burning or detonation.
- Fluorescent lamps: Although DTSC has regulations in place requiring special handling of these lamps, some percentage of the estimated 122 million purchased each year are inappropriately handled and release mercury vapor.
- Naturally-occurring hazards: Some substances native to California present distinct health risks, including asbestos from serpentine rock found in the Sierra Nevada foothills and arsenic found throughout California.
- Terrorism: In addition to the possibility of terrorists using hazardous waste as a weapon, the hazardous wastes generated by an attack could have dramatic adverse human health and environmental impacts.
- Risk assessment: Science lags on the issue of being able to accurately assess the cumulative risk to a single receptor population presented by multiple sources of hazardous substances.

California Integrated Waste Management Board

Major Accomplishments 1999-2003

I. Major accomplishments of the last five years

BUILDING A NEW MATERIALS ECONOMY

- Recycling and the Economy. Recycling now accounts for 85,000 California jobs, generates \$4 billion in salaries and wages, and produces \$10 billion worth of goods and services annually.
- Developing Jobs and Markets for Recycled Products. The Board made 104 loans to recycling-based businesses, creating over 1,500 jobs and resulting in 4.7 million tons of diversion annually—14% of the state's total annual diversion. Working with local Recycling Market Development Zone administrators, the Board has assisted more than 400 recycling-based businesses, creating 3,400 jobs and resulting in more than one million tons of additional diversion annually.
- Financial Assistance. Since January 1, 1999, the Board has awarded 546 grants totaling more than \$27.5 million to assist tribal governments, public agencies and private entities in building and strengthening the state's new materials infrastructure through education, waste reduction, market development, research, and development projects.
- Diversion of Waste from Landfills. In 2000, 63% of all local jurisdictions in the state met the waste diversion requirements of the Integrated Waste Management Act. By 2002, the diversion of waste from landfills increased 85% over 1998 levels, hitting an all-time high of 48%. The Board will continue its efforts assisting local jurisdictions that have not yet reached 50% diversion.
- State Agency Diversion. State agencies and facilities collectively diverted nearly 69% of their generated waste away from disposal in 2002.

SITE CLEANUP

- Disposal Site Cleanup. Over the last 5 years the Board has awarded \$23.6 million in grants and board-managed projects for the cleanup of 282 solid waste disposal sites and provided \$2 million in zero-interest loans for the environmental mitigation of 6 active solid waste facilities. In November 2003 the Board will consider awarding an additional \$750,000 for the cleanup of 32 additional sites.
- Tire Site Cleanup. The Board has expended more than \$6 million to clean up 30 illegal waste tire sites, removing nearly eight million tires. As part of the Westley tire fire remediation that was recently completed, the Board removed an estimated 290,000 tons of contaminated materials at a cost of approximately \$17.5 million.
- Financial Assistance. Since January 1, 1999, the Board has awarded 1,520 grants totaling more than \$93.5 million to assist tribal governments and public agencies with cleanup and enforcement activities to encourage the safe handling and disposal of nonhazardous solid wastes and to remove environmental threats associated with illegal disposal.

SUSTAINABILITY

- Sustainable or “green” building. The Board played a key role in creation of the Sustainable Building Task Force, which is guiding the development of green building strategies for over \$2 billion a year in capital outlay design and State construction that are resulting in long-term savings in State operations, as well as the formation of the Collaborative for High Performance Schools (CHPS), which is impacting the sustainability of K-12 bond-funded school construction of \$25 billion throughout the state. Studies show that “green” classrooms improve student performance and save money.

EDUCATION

- Environmental education. The Board has worked with the State Department of Education, the State Board of Education, and the Office of the Secretary of Education to connect environmental concepts to state education content standards for grades K-12 in multiple subject areas so that we create environmentally literate students/citizens who are able to understand and balance economic interests and environmental sustainability. The Board has worked with these agencies to develop a unified education strategy that links student instructional programs with campus and community environmental programs.

AUTOMOTIVE PRODUCTS

- Tire recycling. The Board’s efforts to reduce the environmental hazards of waste tire storage and disposal and to increase the recovery of resources from tires have spurred the tire recycling rate to nearly 75% of the 34 million used and waste tires generated annually in the state.
- Used oil recycling. The number of certified used oil collection centers has doubled over the past five years; 2,700 certified centers now operate throughout the state providing convenient opportunities for individuals to recycle their used motor oil.
- Antifreeze. In 2002, the Governor signed AB 2474 (Simitian) to require that manufacturers add a bittering agent to any engine coolant or antifreeze sold in California that contains more than 10% ethylene glycol. The addition of a bittering agent will reduce animal and human poisonings that are a result of antifreeze ingestion.

HAZARDOUS HOUSEHOLD WASTES

- Household hazardous waste (HHW). Due in part to funding—129 grants totaling nearly \$21 million—and technical assistance from the Board, the number of permanent HHW collection opportunities has doubled in the past five years. While additional permanent collection infrastructure is still needed, especially to deal with new waste streams such as electronic wastes and fluorescent light tubes, significant progress has been made. Currently there are 108 permanent facilities, 113 recycle only facilities (collecting batteries, oil, paint and antifreeze) and 80 temporary facilities. Permanent facilities exist in 21 different counties representing about one-third of the state.

II. Initiatives still in the implementation phase

CONVERSION TECHNOLOGIES

- Conversion Technologies. The Board has been examining non-combustion “conversion” technologies that have potential to take some of the millions of tons of materials that cannot be diverted and are now sent to landfills, and instead convert them into energy, alternative fuels, and other industrial products. Studies are underway to compare the environmental and health impacts of these technologies with existing solid waste management practices and to determine their potential impact on existing and future recycling and compost markets.

EDUCATION

- Border Education Project. Under the MOU between California and Mexico to formally recognize environmental issues at/near the border, a cross-media, integrated resource conservation curriculum was developed and is being prepared for distribution to elementary school teachers in Baja, California and the surrounding region
- School Diversion and Environmental Education Law. Implementing the mandates of SB 373 through pilot integrated education programs at twenty school districts throughout the state. Programs are designed to focus on multiple environmental themes and will integrate classroom lessons with on-campus projects.

SITE CLEANUP

- Cleanup of Tracy Tire Fire. Board staff is working with the Cal/EPA agencies to complete the remedial action workplan to initiate the cleanup of the Tracy tire fire site where, on August 8, 1998, approximately 7 million tires caught fire. The estimated cost of cleanup is \$9 million.
- Sonoma County Tire Sites. The Board has identified eight illegal waste tire sites in Sonoma County that contain in excess of 1 million waste tires with an estimated cost of cleanup of \$2.5 million.

RUBBERIZED ASPHALT CONCRETE

- Rubberized Asphalt Concrete. The Board has allocated \$1.1 million in FY 03/04 and \$1.2 million in FY 04/05 for grants to cities, counties, districts, and other local government agencies to fund public works projects that use rubberized asphalt concrete (RAC). [SB 1346 (Kuehl), Statutes of 2002, Chapter 671]

TIRE MANIFEST SYSTEM

- Used/Waste Tire Manifest System. A comprehensive tire manifest system to track the generation, transportation and disposal of used and waste tires, under development for two years, was implemented on July 1, 2003. Because the new system includes over 10,000 stakeholders, the Board focused this past summer on educating users about the manifest and trip log forms, and developing finalizing the software to reconcile loads between generators/end users and waste tire haulers. [SB 876 (Escutia), Statutes of 2000, Chapter 838]

III. New initiatives created by legislation to go into affect on January 1, 2004

- **Electronic Waste Recycling.** The Board and the Department of Toxic Substances Control (DTSC) are working closely to implement the Electronic Waste Recycling Act—SB 20 (Sher), Statutes of 2003, Chapter 526—which establishes an advance recycling fee on the retail sale of covered electronic equipment of between \$6 and \$10. The Board will be addressing implementation issues such as the fee collection, reimbursement and enforcement by working with manufacturers, recyclers, collectors and environmental organizations. Fee collection, estimated at \$55 million annually, begins July 1, 2004.
- **Environmental Education.** AB 1548 (Pavley), Statutes of 2003, Chapter 665, expands environmental education programs within the state and creates an environmental education account within Cal/EPA for program implementation.
- **Energy Efficient Tires.** Assembly Bill 844 (Nation), Statutes of 2003, Chapter 645, requires the California Energy Commission, in consultation with the Board, to adopt a Fuel Efficiency Program to ensure that replacement tires are at least as energy efficient (on average) as original equipment tires.

IV. Unaddressed environmental threats

- **Electronic Wastes Not Covered by SB 20.** While SB 20 will create and support a recycling program for computer monitors and televisions many other electronic wastes containing hazardous materials—such as computer peripherals (hard drives, printers, keyboards), cell phones, personal digital assistants (PDAs), fax machines, some flat panel displays—are not covered under the bill. These items represent a significant environmental threat in landfills and through illegal disposal because of the presence of heavy metals such as mercury, lead and cadmium.
- **Universal Waste.** The Board has been working with DTSC to address collection and recycling issues for Universal Wastes as defined in regulations promulgated by DTSC in February 2003. Currently, homeowners can throw certain universal wastes, including fluorescent light tubes and household batteries into the trash. However, this exemption ends in 2006. The State needs to coordinate with local jurisdictions on the development of collection infrastructure and public outreach to ensure that these hazardous materials are handled properly. Fluorescent tubes in particular create an environmental and human health threat as they contain mercury that is released if the tube is broken.

Office of Environmental Health Hazard Assessment

Major Accomplishments 1999-2003

I. Major accomplishments of the last five years

CHILDREN'S HEALTH

- Particulate Matter Standard. June 2002 – Worked with the Air Resources Board (ARB) to develop new state ambient air quality standards for particulate matter that will better protect the health of children, the elderly and people with respiratory and cardiovascular diseases.
- Toxic Air Contaminants. September 2001 – Conducted the nation's most comprehensive review of scientific information on the effect of air toxics on the health of children and infants, resulting in the identification of five toxic air contaminants that may cause children and infants to be especially susceptible to illnesses.
- School Site Chemicals. June 2002 – Compiled a list of chemicals of concern to children's health at new and existing school sites.

PUBLIC HEALTH GOALS (PHGs)

- MTBE Public Health Goal. March 1999 – Completed the nation's first Public Health Goal (PHG) for the fuel additive MTBE that identified a level of MTBE in drinking water that would not be expected to pose a health risk.
- PHGs. February 1999 to September 2003 – Completed PHGs for 42 drinking water contaminants.

PROPOSITION 65

- Listings. January 1999 to October 2003 – Conducted numerous scientific evaluations to support the placement of carcinogens and chemicals causing reproductive toxicity on the Proposition 65 list, which now contains more than 750 chemicals.
- Safe Harbor Numbers. July 2002 to February 2003 – Approved "safe harbor numbers" for 38 chemicals that will guide businesses, the Attorney General and the public on levels of exposure to listed chemicals that require a Proposition 65 warning.

ENVIRONMENTAL PROTECTION INDICATORS FOR CALIFORNIA (EPIC)

- Environmental Indicators. April 2002 – Developed California's first comprehensive set of environmental indicators (measurements of environmental conditions), which ultimately will help policymakers assess the effectiveness of state environmental programs, and plan and allocate resources for future environmental protection activities.

AIR TOXICS HOT SPOTS PROGRAM

- Guidance Manual. October 2003 – Developed a guidance manual and four technical support documents for use by local air quality management districts in assessing health risks from toxic emissions from industrial facilities.
- Reference Exposure Levels. March 1999 to August 2003 – Developed 130 Reference Exposure Levels (RELs) that identify levels of acute and chronic exposure to various air toxins that would not be expected to pose a health risk.

PESTICIDES

- Physician Training. Conducted training sessions throughout California for physicians on the recognition and diagnosis of illnesses stemming from pesticide exposure.

FISH

- Fish Advisories. Evaluated contaminants in sport fish and issued health advisories and helped develop draft advisories concerning the consumption of fish from a number of California water bodies, including Lake Pillsbury, the northern Sierra Nevada foothills, the Trinity River watershed, Tomales Bay, Black Butte Reservoir and San Pablo Reservoir.

BORDER PROGRAM

- Toxicology Training. Conducted training sessions in toxicology and risk assessment for government officials in Mexico and the U.S. who are responsible for health and environmental protection in the border region.

CLANDESTINE DRUG LAB PROGRAM

- Technical Support Documents and Fact Sheets. Summer 2003 – Produced, for use by emergency responders and law enforcement personnel, 13 technical support documents and 10 fact sheets on the health hazards of chemicals that are used to synthesize methamphetamine in clandestine laboratories.

II. Initiatives still in the implementation phase

CHILDREN'S HEALTH

- Ozone Ambient Air Quality Standard. Working with ARB to develop a revised ambient air quality standard for ozone and other "criteria" air pollutants that will better protect the health of children, the elderly and people with respiratory diseases.
- Toxic Air Contaminants. Identifying levels of exposure to specific toxic air contaminants and school-site contaminants that may make children and infants especially susceptible to illnesses.
- Children's Cancer Risk Assessment. Developing specific guidelines for the assessment of children's cancer risks from exposure to environmental contaminants, and the assessment of health risks that children may face from contaminants at school sites.

PUBLIC HEALTH GOALS (PHGs)

- Public Health Goals. Will finalize draft PHGs that will guide the development of the nation's first drinking water standards for perchlorate and chromium 6, and an updating of the standard for arsenic.

PROPOSITION 65

- Acrylamide. Development of regulations to clarify warning requirements for acrylamide in foods.
- Perchlorate and Statin Drugs. Development of scientific documents for consideration of addition of perchlorate and cholesterol-lowering statin drugs to the Proposition 65 list.
- Listings and Safe Harbor Numbers. Continuing to consider chemicals for placement on the Proposition 65 list, and continuing to develop "safe harbor numbers" for listed chemicals.
- Clarifying Amendments. Development of amendments to Proposition 65 regulations to provide greater clarity for businesses, advocacy groups on regulatory requirements.

AIR TOXICS HOT SPOTS PROGRAM

- Reference Exposure Levels and Risk Assessments. Continue to develop RELs and to review health risk assessments of toxic emissions from industrial facilities submitted by the facilities.

TOXIC AIR CONTAMINANT PROGRAM

- Environmental Tobacco Smoke. Updating OEHHA's 1997 report, "Health Effects of Environmental Tobacco Smoke," which ARB will use to determine if it will formally identify environmental tobacco smoke as a toxic air contaminant.

PESTICIDES

- Physician Training. Continuing to train physicians to recognize and diagnose illnesses related to pesticide exposure.

FISH

- Fish Advisories. Finalizing a fish advisory for the Bear River/South Yuba River watershed, which will be the first state fish advisory for the Sierra Nevada region.

RISK BASED SCREENING LEVELS

- Brownfields Screening Levels. Developing risk-based screening levels for several dozen common Brownfields site contaminants that local governments and developers could use to estimate the amount of work necessary to clean up and redevelop contaminated urban properties.

ASSISTANCE TO OTHER AGENCIES

- Health Risk Assessments. Producing, for use by the Integrated Waste Management Board, a report on health risks associated with recycled tire materials, a report on health risks from using tires as a supplemental fuel in cement kilns, and the health risks of using recycled oil as bunker fuel.

- Contaminated Sites. Providing assistance to Regional Water Quality Control Boards, counties and cities in assessing health risks from contaminated sites and the benefits of remediation plans.

III. New initiatives created by legislation to go into affect on January 1, 2004

ENVIRONMENTAL PROTECTION INDICATORS FOR CALIFORNIA (EPIC)

- EPIC Implementation. Will work to identify funding for continuation of EPIC project as mandated by AB 1360 (Steinberg, Chapter 664, Statutes of 2003).

CALIFORNIA ENVIRONMENTAL HEALTH TRACKING PROGRAM (CEHTP)

- Data Integration. Will work with the Department of Health Services (DHS), the University of California and other Cal/EPA entities to assess the feasibility of using existing health and environmental data to find linkages between environmental contaminants and chronic diseases, as required by SB 189 (Escutia, Chapter 407, Statutes of 2003).

PROPOSITION 50 BOND PROGRAM

- Drinking Water Grants. Will provide consultation to DHS on developing criteria for disbursing Proposition 50 grants for drinking-water projects based on public health benefits, as required by AB 1747 (Committee on Budget, Chapter 240, Statutes of 2003).

ALTERNATIVE DRY CLEANING SYSTEMS

- Alternatives to PCE. Will provide consultation to ARB in identifying dry cleaning systems that do not use perchloroethylene (PCE) and are non-toxic and non-smog forming, as required by AB 998 (Lowenthal, Chapter 821, Statutes of 2003).

IV. Unaddressed environmental threats

PERCHLORATE IN FOOD

- Lettuce and Food Crops. Recent studies have shown that perchlorate, a pervasive drinking water contaminant in California, can be taken up into lettuce and other food crops if it is present in irrigation water, and it may also be present in milk.

State Water Resources Control Board

Major Accomplishments 1999-2003

I. Major accomplishments of the last five years

WATER RIGHTS

- Public Trust. July 16, 2003 - SWRCB issued a Water Right Decision on Yuba River aimed at preserving public trust resources.
- Water Quality. March 15, 2000 - SWRCB issued a Water Right Decision requiring water right holders to meet applicable Bay/Delta water quality standards.
- Water Transfer. December 20, 2002 – SWRCB issued a Water Right Decision approving the Imperial Irrigation District Water transfer to San Diego Water Authority.

WATER QUALITY

- Toxics. April 26, 2000 - Implemented standards for 126 toxic substances through the issuance of Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California.
- Toxics. During 2000-2003 - Established a Geographic Information System (GIS) database system to aid in tracking and control of toxic releases to the State's groundwaters.
- Toxics. On November 25, 2002, the SWRCB committed \$3 million from the Cleanup and Abatement Account to aid in cleaning up ground water in the Colton/Rialto area.
- Standards. During 2000-2003 - Implemented the watershed-oriented Total Maximum Daily Load (TMDL) regulatory approach.
- Non-point source. During 2000-2003 - Made major strides in controlling pollution from urban runoff through re-issuance and upgrading of storm water permits for major municipalities and through development general storm water permits for smaller municipalities.

II. Initiatives still in the implementation phase

REGULATION

- Waivers. Throughout 2003 - Establishment and implementation of waste discharge requirement waivers governing the agricultural and timber harvesting industries.
- New Standards. Scheduled for 2004 - Establishment of uniform, maximum standards for on-site disposal systems.

- Standards revisions. Scheduled for 2004 - Revisions, based upon implementation experience, to the State implementation plan for regulation of toxics.

GRANTS

- Local Assistance. Throughout 2003, 2004, 2005 - Implementation of a coordinated Water Quality Grant Program.
- Local Assistance. Throughout 2003, 2004, 2005 - Implementation of a Clean Beach Water Quality Improvement Program.

III. New initiatives created by legislation to go into effect on January 1, 2004

- SB 1049, budget trailer bill. The Board must convert its Water Rights Program to be entirely fee supported.
- AB 1541 (Montanez). Develop an Enforcement Program to expand the mandatory minimum penalty program to encompass reporting violations.

IV. Unaddressed environmental threats

- Water Rights. Environmental effects of excessive water appropriations from major stream systems, such as the Klamath River and the San Joaquin.
- Toxics. Effective prevention and remediation of perchlorate pollution.
- Non-point source controls. Ongoing pollution threats from nonpoint source pollution such as agriculture, timber harvesting, grazing and urban runoff.

California Regional Water Quality Control Board, North Coast Region (1)

Major Accomplishments 1999-2003

I. Major accomplishments of the last five years

WATER QUALITY

- TMDLs—In 1999, the Regional Board adopted TMDLs for the Garcia River watershed for the control of sediment from logging, road construction, gravel mining and ranching. Technical TMDLs for the Noyo River, Navarro River, Gualala River, and the Mattole River have been completed by the Regional Board.
- NPDES Permitting—In 2000, the Regional Board adopted an NPDES permit for the Cities of Santa Rosa, Rohnert Park, and Sebastopol in conjunction with the energy companies which resulted in a unique recycling of advanced treated waste water into the geyser steam field for augmenting power generation.
- Toxic Cleanups—In 2001, the Regional Board used Cleanup and Abatement Account Funds to address tetrachloroethylene and trichloroethylene contamination in three Santa Rosa neighborhoods. The funds were used for sampling wells, soil-gas monitoring, monitoring indoor air quality, well head treatment systems, public health outreach and the connection of 140 homes with contaminated wells to city water.
- Basin Planning—In 2002, the Regional Board adopted amendments to the Basin Plan upgrading the definitions of the Beneficial Uses.
- Non-point source. During 2000-2003 – We made major strides in controlling pollution from urban runoff through adoption of a municipal storm water permit for the City of Santa Rosa and Sonoma County. The Regional Board expanded its role in the control of nonpoint sources of pollutants from logging, hillside vineyards, construction sites and toxic sites.
- General Winery Permit (2002)—The Regional Board adopted a general NPDES permit under which small wineries are regulated.
- Toxic Enforcement and Cleanup—In 2003, the Regional Board ordered Sierra Pacific Industries to cleanup toxic discharges to Humboldt Bay and settled the enforcement case for \$800,000 civil penalty.
- Waivers—In 2002, we established and implemented waivers of waste discharge requirements for timber harvesting operations and other minor waste discharges as required under SB 390.
- Grant Programs – From 1999 to present, the Regional Board administered substantial grants for stream restoration, and rural road decommissioning/upgrading throughout the North Coast Region. The Regional Board also actively sought and was successful in securing significant funds for public works improvements for our small communities.

- Cleanups Completed- The Regional Board adopted a clean closure of landfill on Glass Beach, Fort Bragg. A CAP is being implemented at Remco Hydraulics, Willits
- NCWAP Assessments (FY 2000 to 2003) – Full watershed assessments (geology, land use, fisheries, hydrology, water quality) were completed under the 5-agency North Coast Watershed Assessment Program (NCWAP) for the Gualala and Mattole Rivers, and Redwood Creek (available at www.ncwatershed.ca.gov). Water quality assessments were completed for the Big and Albion Rivers in FY 2002-03. We developed the water quality section of the methods manual for this 5-agency effort, produced a water quality methods appendix, and reviewed and contributed to the entire document.
- Review of Russian River Water Quality Objectives for Protection of Salmonid Species Listed Under the Federal Endangered Species Act (August 2000) – This project resulted in an 80-page assessment of water quality objectives and serves as guidance to revising those objectives to be fully protective of the federally listed anadromous salmonids in the Russian River watershed.
- Klamath River Monitoring Coordination (2003) – We initiated and facilitated a coordination team for the Klamath River aimed primarily at fish die-off early warning and monitoring. Members include a host of federal and state agencies, as well as Native American tribes.
- Regional Surface Water Ambient Monitoring Program (SWAMP FY 2000-01 to FY 2002-03) – The Regional Board established 31 permanent trend water quality monitoring stations throughout the region. In the last two years, using the rotating basin approach, SWAMP collected surface water quality samples at 64 stations variously located in every major river basin in our region. Specifically, SWAMP sampled the Klamath Basin, including the Klamath, Trinity, Scott and Shasta Rivers, Eel River Basin, Smith River, Mad River and Russian River. Smaller coastal systems have been sampled as well including the Van Duzen, Noyo, Navarro, Gualala River, Elk and Freshwater Creek. In the last two years, our regional SWAMP effort has made over 465 site visits and has sampled over 45% of our region's Hydrologic Subareas (HSUs)

II. Initiatives still in the implementation phase

- Basin Planning-The Regional Board is developing a Basin Plan Amendment to address nonpoint sources of sediment from land use practices in support of TMDLs.
- TMDL and Basin Planning-The Regional Board is developing TMDL and Basin Plan amendment for recovery of Beneficial uses impaired by multi demands of water for irrigated agriculture and fisheries in the Klamath River.
- Technical TMDLs-TMDL analyses are in progress in the Salmon River, Lost River, Scott River, and Shasta River

III. New initiatives created by legislation to go into effect on January 1, 2004

- SB 810, Timber Harvest Plan veto bill. The Regional Board must develop an implementation strategy for vetoing timber harvest plans that threaten to impede the recovery of water quality of streams listed under Section 303(d) of the Clean Water.

IV. Unaddressed environmental threats

- TMDLs- Water Quality and Quantity issues on the Klamath River and the environmental effects on the beneficial uses.
- Non-point source controls. Ongoing pollution threats from nonpoint source pollution such as agriculture, timber harvesting, grazing and urban runoff.
- Water Rights and Water Quality-The effect of water right approvals on water quantity and quality.

California Regional Water Quality Control Board, San Francisco Bay Region (2)

Major Accomplishments 1999-2003

I. Major accomplishments of the last five years

- Invasive Species. During 1999 – 2000 - Raising the issue of exotic species' impairment of water quality in the San Francisco Estuary in 1998, Board identified the need for treatment of ship ballast water and establishment of standards spurring on the successful state law implemented by the State Lands Commission and the federal rulemaking currently underway by the U.S. Coast Guard.
- Copper and nickel objectives. During 1999-2002 - Established specific water quality objectives and pollution prevention actions to resolve copper and nickel impairment of South San Francisco Bay.
- NPDES Permit Backlog. During 1999-2003 - Reduced the NPDES permit renewal backlog for major dischargers from 78% to 6% while implementing the stricter State Implementation Plan.
- Flood Management. During 1999-2003 - Worked with flood management agencies and stakeholders to approve significant flood management projects for the cities of Napa and San Jose that provide adequate flood protection while restoring creeks and wetlands and enhancing habitat.
- Outreach. During 1999-2003 - Developed a variety of outreach materials, including books, CDs, and videos, and conducted numerous "how to" erosion control seminars (8/year totaling 500/yr attendees) that the regulated community has used to assist in preparing applications for work in State waters and in complying with stormwater regulations;
- Gambonini mine (Marin County) – During 1999-2003 – conducted cleanup in collaboration with US EPA to significantly reduce mercury input to Tomales Bay from the abandoned Gambonini Mine.
- Early Transfer of Military Bases: During 1999-2003 - Facilitated the early transfer of four contaminated military facilities (Hamilton Army Airfield, the San Francisco Presidio, Mare Island Naval Shipyard and the Alameda Naval Supply Center Annex) prior to completion of cleanup actions to joint public/private bodies, creating significant time and cost savings through the integration of environmental cleanup and redevelopment activities.
- Redevelopment of Landfills. During 1999 – 2003 - Active in working with dischargers on the redevelopment of old, closed or inactive landfills, including siting of commercial facilities such as Home Depot stores, commercial office buildings and recreational open space.
- Monitoring and assessment. During 1999-2003 - Completed monitoring 12 watersheds in the Region for water quality, toxicity and the health of organisms that live in the creeks and are in the process of writing up an interpretive report; completed monitoring 10 reservoirs where people fish to determine if the level of contaminants in fish require a health advisory by OEHHA; and completed monitoring contaminants in fish in Tomales Bay resulting in a health advisory for fish consumption.

- Enforcement. During 1999-2003 - Conducted 70 formal enforcement actions for non-compliance, penalizing violators nearly \$4 million, of which about half resulted in environmental projects and half in penalty payments, as well as improved the compliance rate at NPDES-permitted facilities to 3.5 violations per facility, as compared to a statewide average of 5.4 violations.
- Electronic Reporting. During 1999-2003 – Developed and implemented a fully operational electronic reporting system (ERS) for NPDES permittees that automates monitoring data submittal by the dischargers, facilitates permit reissuance, compliance tracking, basin plan amendments, loading assessment for TMDLs, and public access via WWW.
- Underground Storage Tanks (UST). During 1999-2003 – Closed about 1,200 leaking underground fuel tank cases, most in cooperation with local oversight agencies, and about 100 non-fuel cases.
- Soil and Groundwater Cleanups. During 1999-2003 – Required cleanup actions that removed over 300,000 pounds of soil and groundwater contaminants.
- Brownfields. During 1999-2003 – Provided regulatory oversight to support “brownfields” cleanup and redevelopment at over 200 sites, including San Francisco’s Mission Bay and the former Pacific Refining site in Hercules.
- Innovative cleanup technologies. During 1999-2003 – Approved innovative technologies for cleanup of groundwater contamination at over 100 sites.
- Monitoring. During 2000-2003 - Working with local citizens and agencies, SF Regional Board staff initiated the Surface Water Ambient Monitoring Program in 2000 to measure water quality in the many streams and reservoirs of the Bay Area for the first time, to systematically evaluate attainment of water quality standards.
- Bay Goals. 2000 – Successfully managed the Baylands Ecosystem Goals Project to define the nature of habitat improvements and restoration for nearshore Bay environments.
- Customer service. During 2000-2003 - Worked with flood management agencies and other groups needing permits to maintain their water-based facilities to issue long-term general permits that both streamline permitting and provide certainty on what control measures the agencies need to implement.
- Stormwater. During 2001-2003 - Updated countywide municipal stormwater permits to include requirements for state-of-the-art urban runoff controls on new and redevelopments and for minimizing the impacts from increases in impervious surfaces.
- Environmental Screening Levels. - During 2001-2003 - Established environmental screening levels (now posted to the web) for common soil and groundwater contaminants to determine where additional investigation or cleanup is needed for site cleanups and/or redevelopment.
- MTBE. During 2001-2003 – As a followup to priority cleanups at known MTBE sites, required MTBE monitoring at over 150 operating gas stations located near significant groundwater resources or existing municipal wells, to supplement leak-detection by gas stations leading to numerous new MTBE discoveries.
- Bioremediation. January 2002 - Permitted the nation’s largest in-ground bioremediation project at the Dow Chemical facility in Pittsburg for cleanup of solvents in groundwater.
- Dairies – During 2002-2003 – Inspected and ranked all dairies in region for compliance and then conducted focused "special project" targeting dairies by expanding outreach to the dairy community,

systematically inspecting and providing direction on compliance to dairies, and implementing a streamlined regulatory approach to dairy oversight, all of which have resulted in improved compliance and water quality, and a dairy industry more supportive of water quality protection.

- Cargill Salt Pond Acquisition. During 2002-2003 - Assisted the CDFG and Wildlife Conservation Board by reviewing toxic pollutant and other water quality information and providing them critical advice during negotiations that helped them to negotiate the purchase of 16,000 of Cargill Salt Ponds in South San Francisco Bay.
- Groundwater protection. 2003 - Published second report in conjunction with input from numerous stakeholder groups evaluating groundwater protection strategies and beneficial uses for groundwater basins in the San Francisco Bay Area.

II. Initiatives still in the implementation phase

- TMDLs: Scheduled for 2004 - TMDLs for mercury and PCBs in San Francisco Bay; for pesticides in San Francisco Bay Region urban creeks; and TMDL for pathogens in Tomales Bay.
- Watershed management and action plans. Ongoing - Development of watershed management plans and associated, prioritized action plans for all the Region's watersheds.
- Collaboration. Ongoing - Through collaboration with such regulated-community groups as the Bay Area Clean Water Agencies, the Clean Estuary Partnership, the Bay Area Stormwater Management Agencies Association, the Santa Clara Basin Watershed Management Initiative, and the North Bay Watershed Association, we are more efficiently using limited state and local resources to implement such water quality protection programs as pollution prevention, water recycling, sanitary sewer overflow control, regional monitoring, hydromodification control, and development of TMDLs.
- Habitat Restoration. Ongoing - Baylands, wetlands, and other waters, as identified in the Baylands Ecosystem Habitat Goals Report completed by the Board and other agencies in 1999, has helped initiate significant restoration, including Bair Island, the Napa-Sonoma Marsh System, and the South Bay Salt Ponds.
- Urban stormwater programs. Scheduled for 2004 - Phase 1 for Contra Costa, San Mateo, Santa Clara, and Alameda counties are completed; Phase 2 for the remaining counties in the Region will be implemented which will address the current major remaining source of active urban runoff pollution.
- Vapor Intrusion Pathway. Scheduled for completion 2004 - Required targeted contamination sites to investigate potential vapor intrusion from volatile contaminants into homes and businesses, based on new evidence of potential threats to human health.
- Bay Toxics Hot Spots. Ongoing - The Bay Protection and Toxic Cleanup Program, completed in 1999, has generated a scientifically defensible list of priority non-military sediment cleanup sites in the San Francisco Bay which now are being put under cleanup orders in cooperation with responsible parties.
- Bayfront landfills. Ongoing - Evaluating threats to the San Francisco Bay Estuary due to active and closed bayfront landfills constructed within historic baylands and diked wetlands.

- Future Regulatory Guidance. Ongoing – Staff representatives are participating in national workgroups with other state and federal regulators to prepare guidance on the use of innovative cleanup technologies to streamline permitting and foster consistency.
- Grants. Scheduled for 2003, 2004, 2005 - Focusing on management of grants for watersheds and nonpoint sources from state bonds (Props. 13, 40 and 50) which will likely provide the most significant water quality benefits of the next decade.
- Regional Monitoring Program. Ongoing - Providing direction for the San Francisco Estuary Regional Monitoring Program (RMP) resulting in supplying the Board with the best scientific information available to guide the regulation and management of the Bay.
- Electronic Files. Ongoing – Now implementing electronic system for all Board documents for better security, easier access by staff and public, and lower cost of maintenance.

III. New initiatives created by legislation to go into effect on January 1, 2004

- AB 1541 (Montanez). Expand and implement Enforcement Program to include NPDES reporting violations as part of the mandatory minimum penalty program.

IV. Unaddressed environmental threats

- Water diversion(s). Continuing and future impacts on beneficial uses, from the large scale (e.g., reduced Delta outflows) to the smaller local scale (e.g., irrigation diversions or groundwater pumping that dry up small streams).
- Aerial deposition. Resolution of regulatory authority from aerial deposition, e.g., dioxins.
- New pollutants. Prevention of the impairment and/or remediation of new and evolving pollutant categories, such as flame-retardants, pharmaceuticals, and endocrine disruptors that affect beneficial uses of surface and ground waters.
- Resources. Lack of resources to consider abandoned or marginal sites requiring cleanup.
- Non-point sources. While most types of nonpoint source pollution have been identified, outreach and stakeholder involvement needs to be implemented to address all sources.
- Above Ground Tank Cleanups. Investigations and cleanups associated with elimination of the Above Ground Tank Program.
- Leaking Sewers. Impacts remain largely un-evaluated, particularly in urban areas where historic drycleaners disposed denser-than-water solvents, which may penetrate sewer pipelines.
- Bay Toxic Hotspots. Many have not yet been addressed.
- Sediments. Need to establish environmentally protective contaminant concentrations for sediments for wetlands, stream beds, Bay, etc.

California Regional Water Quality Control Board, Central Coast Region (3)

Major Accomplishments 1999-2003

I. Major accomplishments of the last five years

WATER QUALITY

- Directed investigation and cleanup MTBE plumes that impacted or threatened to impact municipal supply wells Northern Monterey County, Lake San Antonio, Cities of Los Osos, Morro Bay and Cambria.
- Avila Beach Soil and Groundwater Cleanup: - Approved closure, officially ending the cleanup of the hydrocarbon spill beneath four city blocks in the town of Avila Beach, San Luis Obispo County.
- TMDLs - During 2000-2003 Implemented watershed-oriented Total Maximum Daily Load (TMDL)s in two of Region 3's highest priority watersheds: San Lorenzo River Watershed and Morro Bay Watershed.
- Power Plant Permits. - Reissued an NPDES permit regulating the continued operation of the Duke Energy Moss Landing Power Plant in Monterey County ; Working cooperatively with the California Energy Commission regarding the reissuance of the Morro Bay Power Plant NPDES permit; and worked with Pacific Gas and Electric regarding the reissuance of the Diablo Canyon Nuclear Power Plant NPDES permit.
- Non-point source. 2000-2003 – Developed watershed management plans for Santa Maria River, Oso Flaco Creek, and San Antonio Creek in Santa Barbara County, all listed, impaired water bodies.

MONITORING AND ASSESSMENT

- 2000 - 2003 – Our Central Coast Ambient Monitoring Program (CCAMP) has provided software and technical support for three consecutive volunteer “Snapshot Days”. This includes the Coastwide Snapshot Day project, where over 600 volunteers up and down the State collected data on water quality conditions at 547 sites.
- 2001 - The CCAMP program completed development of a data management system which aids in electronic uptake of lab data, checks data against chain of custody sheets for completeness, checks data quality, provides basic data mapping and graphic tools, and uploads data to our website for public access and viewing. This system is now being used to support the State Water Resource Control Board's Surface Water Ambient Monitoring Program.
- 1998-2003 - Completed a five-year cycle of watershed rotational basin monitoring in March 2003. This means data has been collected from waterbodies throughout our region, and we now have a much better understanding of surface water quality issues of concern.

- 2003 – Obtained settlement and grant funding for sea otter researchers to investigate high levels of mortality in the California Sea Otter. Research will include investigation of several pathogenic diseases of terrestrial origin, and understanding the role of bioaccumulated pollutants in sea otter mortality.

II. Initiatives still in the implementation phase

REGULATION

- Waivers. Throughout 2003 – Established and implemented waste discharge requirement waivers governing the agricultural and timber harvesting industries.
- Waste Discharge Requirements. 2002-2007 – Developed a five-year Stream Maintenance Program for the Santa Clara Valley Water District for stream maintenance in southern Santa Clara Valley and approved Salinas River Channel maintenance work (2003-2008) to reduce flooding impacts without significant water quality impacts.
- Waste Discharge Requirements. – Developed General Waste Discharge Requirements for Aquaculture and Aquariums ; highly treated groundwater remediation sites ; and wineries.
- Storm Water 2003-2004 Review storm water management plans for 62 designated small MS4s.

WATER QUALITY

- Advisory panel of agricultural and environmental representatives was convened to provide input on a program of tiered conditional waivers to replace expired waivers for irrigated agriculture.
- Framework developed to replace expired waivers for the regulation of future timber harvest activities
- Toxics. Continue oversight of investigation and remediation of a perchlorate plume in Southern Santa Clara County that has effected over 400 domestic, agricultural, and municipal water supply wells.
- Non-point source. Coordinated mainstream agricultural industry participation in efforts to reduce polluted runoff. Thirteen Farm Bureau-led watershed workgroups have formed, with twelve more in the formation process.

GRANTS

- Non-point source. During 2000-2003 – Established schedules and directed grant funding for implementation of best management practices to control runoff from grazed lands, agricultural areas and urbanized areas in small municipalities throughout the region.

III. New initiatives created by legislation to go into effect on January 1, 2004

None

IV. Unaddressed environmental threats

- Standards. Basin Plan standards that are outdated or difficult to interpret are impeding ability to characterize water quality problems and develop solutions that will adequately protect water quality.
- High and increasing total dissolved solids and nitrate levels in groundwater basins throughout the Region.
- Continued degradation of surface waters due to increased urbanization and need for improved local planning.

California Regional Water Quality Control Board, Los Angeles Region (4)

Major Accomplishments 1999-2003

I. Major accomplishments of the last five years

BASIN PLAN AMENDMENTS

- Bacteria Objectives Basin Plan Amendment. In October 2001, the Regional Board adopted a Basin Plan amendment to revise bacteria objectives for waters designated for water contact recreation to reflect objectives specified by California Code of Regulations and 1986 U.S. EPA criteria.
- Ammonia Basin Plan Amendment. In April 2002, the Regional Board adopted a Basin Plan amendment to Update Ammonia Objectives for Inland Surface Waters to reflect 1999 USEPA criteria.
- Compliance Schedule Basin Plan Amendment. In January 2003, the Regional Board adopted a Basin Plan amendment authorizing compliance schedules in NPDES permits.
- Recreational Use Suspension Basin Plan Amendment. In July 2003, the Regional Board adopted a Basin Plan amendment allowing the temporary suspension of recreational uses in engineered channels during unsafe wet weather conditions.

TMDLs

- San Gabriel River East Fork Trash TMDL. In May 2000, the Regional Board adopted a Basin Plan Amendment for a Total Maximum Daily Load for the reduction of trash in the East Fork of the San Gabriel River and its tributaries in the San Gabriel River Watershed (a highly used weekend recreation area.)
- Los Angeles River Trash TMDL. In September 2001, the Regional Board adopted a Basin Plan Amendment for a Total Maximum Daily Load for the reduction of trash in the Los Angeles River and its tributaries in the Los Angeles River Watershed.
- Ballona Creek Trash TMDL. In September 2001, the Regional Board adopted a Basin Plan Amendment for a Total Maximum Daily Load for the reduction of trash in Ballona Creek and its tributaries in the Ballona Creek Watershed.
- Santa Monica Bay Beaches Dry Weather Bacteria TMDL. In January 2002, the Regional Board adopted a Basin Plan amendment to incorporate a dry weather Total Maximum Daily Load for bacteria at Santa Monica Bay beaches.
- Santa Monica Bay Beaches Wet Weather Bacteria TMDL. In December 2002, the Regional Board adopted a Basin Plan to incorporate implementation provisions for the Region's bacteria objectives and to incorporate a wet weather Total Maximum Daily Load for bacteria at Santa Monica Bay beaches.

- Calleguas Creek Nitrogen TMDL. In October 2002, the Regional Board adopted a Basin Plan amendment for a Total Maximum Daily Load for nitrogen compounds and related effects in the Calleguas Creek Watershed. This TMDL was approved by State Board and the Office of Administrative Law on March 29, 2003 and June 5, 2003, respectively, and by the U.S. EPA on June 20, 2003.
- Santa Clara River Chloride TMDL. In February 2003, the Regional Board adopted a Basin Plan amendment for a Total Maximum Daily Load for chloride in the Santa Clara River Watershed and revised the TMDL in August 2003.
- Los Angeles River Nitrogen TMDL. In July 2003, the Regional Board adopted a Basin Plan amendment for a Total Maximum Daily Load for nitrogen compounds and related effects in the Los Angeles River Watershed. This TMDL is scheduled to be considered by State Board on November 19, 2003.
- Marina del Rey Bacteria TMDL. In July 2003, the Regional Board adopted a Basin Plan amendment for a Total Maximum Daily Load for Bacteria at Marina del Rey Harbor Mothers' Beach and Back Basins.
- Santa Clara River Nitrogen TMDL. In August 2003, the Regional Board adopted a Basin Plan amendment for a Total Maximum Daily Load for nitrogen compounds and related effects in the Santa Clara River Watershed. This TMDL is scheduled to be considered by State Board on November 19, 2003.
- McGrath Beach Bacteria TMDL. In July 2003, the Regional Board adopted a Total Maximum Daily Load for Coliform and Beach Closures at the Santa Clara River Estuary/Surfers' Knoll, McGrath State Beach, and Mandalay Beach through the issuance of a cleanup and abatement order.

NPDES PERMITTING

- CTR-SIP Criteria. Since 2000, staff have been updating National Pollutant Discharge Elimination System (NPDES) permits using California Toxics Rule (CTR) criteria and State Implementation Plan (SIP) provisions, including interim monitoring for Priority Pollutants and Dioxin, in order to protect aquatic life.
- Updated NPDES Permit Requirements. Using Basin Plan criteria, staff directed Publicly-Owned Treatment Works (POTWs) to improve the quality of their discharge by making improvements to their treatment plants, such as adding nitrification-denitrification, step-feed aeration, etc.
- Treatment Plant Upgrades. Achieved full secondary treatment at the Joint Water Quality Control Plant and Hyperion Wastewater Treatment Plants.
- Treatment Plant Upgrades. Required Moorpark and Ojai Wastewater treatment plants to upgrade their treatment plants to secondary, and tertiary treatment, respectively.
- General NPDES Permits. Renewed four General Permits and developed one new General Permit to streamline the permitting process for certain types of discharges.

GROUNDWATER REMEDIATION

- San Fernando Valley Groundwater Investigations. Initiated the Chromium VI Investigation in San Fernando Valley through a cooperative agreement with USEPA.
- San Fernando Valley Groundwater Investigations. Inspected 255 potentially responsible parties (PRPs) for chromium contamination.

- San Fernando Valley Groundwater Investigations. Staff have participated in many Chromium VI outreach efforts to the public, environmental groups and law associations since 1999.
- San Fernando Valley Groundwater Investigations. In January 2003, staff completed the Phase I Chromium report documenting the investigation from 1999 to 2002.
- San Fernando Valley Groundwater Investigations. To date, 6 Cleanup and Abatement Orders have been issued to specifically address Chromium contamination.
- San Fernando Valley Groundwater Investigations. Assessments, groundwater monitoring, and cleanups continue at sites impacted with volatile organic compounds (VOCs) and heavy metals.
- San Gabriel Valley Groundwater Investigations. Several production wells have been taken out of service due to elevated concentrations of perchlorate and we are working with Federal, State and local regulatory agencies in an effort to locate the source facilities.
- San Gabriel Valley Groundwater Investigations. Since November 1999, Regional Board staff have issued 16 Cleanup and Abatement Orders against PRPs in the Azusa/Baldwin Park areas in order to accelerate soil cleanup, reduce contaminant recharge of the existing VOC plume and shorten the time for groundwater remediation.
- San Gabriel Valley Groundwater Investigations. Cases are being closed once our cleanup requirements are fulfilled and staff are striving to work with individual owners who want to sell, revitalize or refinance properties throughout the area.
- San Fernando Valley Groundwater Investigations. Have initiated groundwater monitoring for the presence of emergent chemicals (N-nitrosodimethylamine (NDMA), perchlorate, 1,4-Dioxane, 1,2,3-Trichloropropane, Total chromium and Chromium VI).
- San Gabriel Valley Groundwater Investigations. Have initiated a study, assisted by USEPA, to direct all responsible parties in the Puente Valley and South El Monte Operable Units to sample their groundwater monitoring wells for the presence of emergent chemicals (N-nitrosodimethylamine (NDMA), perchlorate, 1,4-Dioxane, 1,2,3-Trichloropropane, Total chromium and Chromium VI).
- San Gabriel Valley Groundwater Investigations. Emergent chemical sampling has already been completed in the Baldwin Park and El Monte Operable Units.
- San Gabriel Valley Groundwater Investigations. Conducted over 300 site inspections of suspected VOC impacted sites.
- Region-wide Groundwater Investigations. Have initiated a study to collect groundwater information for the presence of emergent chemicals (N-nitrosodimethylamine (NDMA), perchlorate, 1,4-Dioxane, 1,2,3-Trichloropropane, Total chromium and Chromium VI).
- Region-wide Groundwater Investigations. Working on 14 Chromium impacted sites in the Central Groundwater Basin area.
- Region-wide Groundwater Investigations. Staff are working with the USEPA, Department of Toxic Substances Control, Department of Health Services, the Water Replenishment District in Central Basin, several cities and water supply companies to coordinate groundwater cleanup activities, accelerate permitting, and bring about more definitive action within this area.

- Region-wide Groundwater Investigations. Staff are currently overseeing the assessment and cleanup of over 1,000 soil and groundwater impacted sites in the region, including former military bases and facilities, aerospace and defense companies, dry cleaners, industrial sites, etc.
- Brownfield Program. Established a partnership with USEPA, state and local agencies in accomplishing community redevelopment projects.
- Brownfield Program. Goals of the program include appropriate cleanup of underutilized contaminated sites in a timely manner; effective protection of ground water resources; job creation and increased tax revenue.
- Brownfield Program. Staff are currently working with 11 cities and/or redevelopment agencies overseeing assessment and cleanup projects, including residential, retail and commercial sites.

ENFORCEMENT AND GROUNDWATER PERMITTING

- Enforcement. Enforcement activity increased over the previous five years, resulting in the issuance of a total of 140 complaints assessing \$5,291,285 in penalties.
- Landfills. The Landfills program has required all active Class III landfills in the LA Region to design containment structures and final covers to Class I seismic standards.
- General Permit for Subsurface Disposal. In 2001, the Regional Board issued General Waste Discharge Requirements for Small Commercial and Multifamily Subsurface Sewage Disposal Systems which regulate septic discharges from commercial and multi-family sewage disposal facilities.
- Halaco. The Regional Board adopted a Cease and Desist Order for the Halaco metals recycling facility, resulting in the ceasing of the discharge of liquid wastes to the surface impoundment.

STORM WATER

- Municipal Storm Water Regulation. The Regional Board adopted numerical water quality mitigation criteria for new development and redevelopment in 2000, to clean up storm water pollution from urban development. The numerical criteria serves as a statewide model, which is now being implemented by municipal governments in the region and statewide.
- Municipal Storm Water: At the nomination of the Regional Board, the County of Ventura won the 2003 USEPA National Clean Water Act award in the Municipal Storm Water sub-category for their proactive compliance and sustained efforts to meet CWA goals.
- Storm Water from Heavy Industry. Since 2000, the Regional Board has used a combination of outreach and enforcement to bring about 4,000 permittees in heavy industrial sectors (including construction) into administrative compliance with general storm water permits.

UNDERGROUND STORAGE TANKS

- Underground Storage Tank Case Closures. A total of 347 case closures were granted in the last 5 years.
- MTBE. In 2000, completed investigation of pollution sites and completed cleanup activities in the Malone wellfield.

- MTBE. In 2002, completed investigation of pollution sites and completed cleanup activities in the North Hollywood wellfield.
- MTBE. In 2002, completed investigation of pollution sites and completed cleanup activities in the Verdugo Wellfield.
- MTBE. Due to MTBE detection in all above three wellfields, staff investigated the sites that may be potential sources.
- MTBE. Successfully investigated pollution sites and completed cleanup activities in the Arcadia wellfield, which was shut down in 1996 due to MTBE contamination. The Regional Board issued a cleanup and abatement order to the responsible party, and in 2002, the cleanup was completed and the wellfield was back in service.

SANTA MONICA BAY RESTORATION COMMISSION

- Establishment of Commission. Established new locally based, independent state organization (Santa Monica Bay Restoration Commission (Senate Bill 1381 (Kuehl) Statutes 2002)) to promote restoration of Santa Monica Bay. (Was previously known as the Santa Monica Bay Restoration Project.) The Commission is primarily responsible for implementing and financing projects to improve Bay water quality, conserve and rehabilitate natural resources and protect the health of the Bay's recreational users.
- Financing. Secured over \$25 million through Proposition 12, to finance Bay pollution prevention and habitat restoration projects. An additional \$20 million in Proposition 50 is directed to Santa Monica Bay restoration activities.
- Pollution Preventing and Habitat Restoration. To date, have funded 37 programs, including installation of storm water pollution prevention and capture (trash, bacteria, sediment) devices, kelp bed habitat restoration, educational programs at the Santa Monica Pier Aquarium, steelhead habitat restoration, eradication of invasive aquatic and riparian habitat species, restoration of the Madrona freshwater marsh, wetland and riparian habitat restoration in the coastal watersheds of the Santa Monica Mountains (including Malibu Creek, Topanga Creek, Solstice Creek, Nicholas Canyon Creek, Las Virgenes Creek and Tuna Canyon), and coastal habitat restoration (Ballona Dunes, Redondo Beach Bluffs, rocky intertidal habitats).
- Financing. Facilitated financing of \$8 million in county bond funds for projects to divert contaminated dry-weather flows from Bay beaches to municipal wastewater systems.
- Restoration. Restored the coastal lagoon and wetland habitats at Zuma Beach in partnership with the National Park Service and Los Angeles County Department of Beaches and Harbors.
- Environmental Indicators. Developed a State of Santa Monica Bay report for the general public and policymakers, highlighting environmental indicators of the Bay's condition, status and trends.
- Environmental Justice Outreach. Developed health risk communication programs dealing with the consumption of contaminated recreational and commercially caught seafood (partnership project with USEPA and CA Department of Health Services). This outreach program is targeted primarily to local Asian/Pacific Islander, African American and Latino community organizations.
- Research. Organized, funded and participated in multi-agency research projects regarding the economic valuation of southern California beaches, condition of the Southern California Bight, sources

and contribution of atmospheric deposition to urban runoff pollution, and the condition of Bay sub-tidal habitats.

II. Initiatives still in the implementation phase

TMDLs

- Regional Board staff completed hydraulic and water quality modeling of the Dominguez Channel and portions of the Los Angeles Harbor to support development of TMDLs to address impairments by fecal coliform and metals.
- Regional Board staff is also currently working on developing the following TMDLs: the Malibu Creek/Lagoon Bacteria TMDL, the Ballona Creek Toxics TMDL (for metals and historical pesticides) and the Marina del Rey Toxics TMDL (for metals and historical pesticides).

REMEDIATION

- San Fernando Valley Groundwater Investigations. Regional Board staff will be requiring additional chromium assessment work to be performed at 105 sites to determine whether they contributed Chromium VI pollutants to the groundwater. The remaining 150 investigated sites are being recommended for closure.
- San Fernando Valley Groundwater Investigations. In August 2003, USEPA has a placed-based contractor at the Regional Board to continue with the investigation of the 105 Chromium sites.
- San Fernando Valley Groundwater Investigations. Staff has identified an additional 300 Chromium VI sites overseen by other regulatory agencies that are worthy of further investigation, however funding constraints make proceeding with this phase difficult.
- San Fernando Valley Groundwater Investigations. Staff are working with the USEPA, Department of Toxic Substances Control, Department of Health Services, the Upper Los Angeles River Area Watermaster, several cities and water supply companies to coordinate groundwater cleanup activities, accelerate permitting, and bring about more definitive action within all seven Superfund Operable Units.
- San Gabriel Valley Groundwater Investigations. Staff are working with the USEPA, Department of Toxic Substances Control, Department of Health Services, the Main San Gabriel Valley Watermaster, the San Gabriel Basin Water Quality Authority (WQA), several cities and water supply companies to coordinate groundwater cleanup activities, accelerate permitting, and bring about more definitive action within all seven Superfund Operable Units.
- San Gabriel Valley Groundwater Investigations. Currently staff are converting the remaining active VOC Superfund cases to State Cost Recovery to hasten site remediation and closure.
- San Gabriel Valley Groundwater Investigations. Staff are also trying to locate the sources of VOC and perchlorate groundwater contamination in the Pomona, La Verne and Claremont areas.
- San Gabriel Valley Groundwater Investigations. Staff continue to assist USEPA and NASA with assessment and cleanup at Jet Propulsion Laboratories (JPL) in Pasadena.

ENFORCEMENT AND GROUNDWATER PERMITTING

- Septic System Permitting Efforts in Malibu. The Regional Board is in the process of identifying all commercial and multifamily residential septic systems in Malibu, in conjunction with a Clean Beaches Initiative to evaluate the impact of septic systems in the civic center area.

STORM WATER

- Municipal Storm Water Monitoring. To integrate monitoring efforts and provide better data, all coastal Regional Boards (LA, Santa Ana, and San Diego) in southern California formed a partnership with six Southern California Municipal Storm Water Programs and the Southern California Coastal Waters Research Project to conduct critical research on storm water pollution and find management solutions for the Southern California coastal region. Projects in progress include bacterial source identification, standardization of municipal storm water monitoring, development of integrated biological indices, and development of peak flow discharge rate and duration criteria.
- Storm Water from Heavy Industry. The Regional Board has substantially increased its field presence, and is making progress on helping industrial facilities to develop and implement better environmental practices. However, this effort needs to be sustained, and even increased.

SANTA MONICA BAY RESTORATION COMMISSION

- Restoration. Development of restoration plans for the Ballona and Malibu wetlands (in partnership with other state agencies).
- Watershed Management. Development of a comprehensive strategy for storm water BMP implementation in Bay watersheds.
- Watershed Management. On-site wastewater management in the Malibu Creek (and other unsewered) watersheds.
- Watershed Management. Development of a watershed management plan for the Ballona Creek watershed.
- Clean Beaches. Support to the State Water Resources Control Board in implementation of the Governor's Clean Beaches Initiative.
- Grant Projects. Continued implementation and oversight of bond financing programs in partnership with the Coastal Conservancy and State Water Resources Control Board.
- Contaminated Sediment. Long-term oversight of the "institutional controls" components of the Palos Verdes Shelf DDT/PCB sediment contamination settlement.
- Contaminated Sediment. Long-term resolution of DDT/PCB contamination of Palos Verdes Shelf sediments.

III. New initiatives created by legislation to go into effect on January 1, 2004

None

IV. Unaddressed environmental threats

- Persistent Organic Pollutants. Persistent organic compounds in consumer products that ultimately contaminate municipal wastewater and urban runoff.
- Nonpoint source. Ongoing pollution threats from nonpoint source pollution such as agriculture, aerial deposition, and urban runoff.
- Emergent Chemicals. Identification and cleanup of sites potentially contaminated with emergent chemicals (N-nitrosodimethylamine (NDMA), perchlorate, 1,4-Dioxane, 1,2,3-Trichloropropane, Total chromium and Chromium VI).
- Beach contamination. The Regional Board has been at the forefront of beach contamination cleanup through the implementation of the latest standards and the adoption of Trash TMDLs for the Los Angeles River and Ballona Creek, Bacteria TMDLs for Santa Monica Bay Beaches and the Marina del Rey Harbor, and the Los Angeles County municipal storm water permit. The focus must now be on the successful implementation of recently adopted TMDLs and storm water permits. In addition, the Regional Board will address contamination issues at isolated Ventura County beaches with unaddressed impairments.
- Upcoming TMDLs. Regional Board will address additional beneficial use impairments in the region through adoption of the following TMDLs: Los Angeles Harbor Bacteria TMDL, Malibu Creek/Lagoon Nutrients TMDL, Los Angeles River Metals TMDL, and Los Angeles River Bacteria

California Regional Water Quality Control Board, Central Valley Region (5)

Major Accomplishments 1999-2003

I. Major accomplishments of the last five years

- **Irrigated Agriculture.** Runoff from irrigated agriculture has degraded many streams in the Central Valley. In December of 2002 and in July of 2003 the Regional Board adopted conditional waivers for the discharge of waste in storm water runoff and drainage. The conditions of these waivers require irrigated agriculture to characterize their waste discharge and implement management practices to reduce the waste discharge. The requirements placed on the agricultural discharge by the conditional waiver represent a major step forward in our work to reduce the water quality impacts from agriculture.
- **Timber Harvesting.** Improper logging operations can severely impact water quality. A new waiver of waste discharge requirement for timber harvesting has increased water quality protection for timber harvest activities.
- **TMDLs (Total Maximum Daily Loads).** TMDLs have been adopted for toxic concentrations of metals in the upper Sacramento River, selenium in the San Joaquin River, diazinon in the Sacramento and Feather Rivers, and mercury in Clear Lake.
- **Mine cleanups.** Several mine cleanups have been partially or fully completed with state, federal or private funds, eliminating recurring fish kills in the upper Sacramento River, Mokelumne River, Lake Shasta, and other water bodies.
- **Aerojet Superfund Site, Sacramento -** Aerojet was ordered to investigate the extent and develop remedies for groundwater contamination. Several public water supply wells were closed due to perchlorate, TCE, and NDMA. Aerojet was also directed to replace lost water supplies and develop contingency plans for potential future losses. Aerojet developed a first-of-its-kind treatment system for removal of perchlorate from water. This site is where perchlorate first became a cleanup issue.
- **Westley Tire Fire.** Several million tires burned, creating severe soil and water pollution problems. The Regional Board participated in the cleanup and reclamation of the tire fire site where 290,000 tons of wastes were removed to minimize the threatened discharge of pollutants to groundwater and surface water.
- **Municipal Stormwater.** Major changes in the municipal stormwater permit programs for the cities of Sacramento, Stockton and Modesto have required that new construction implement Best Management Practices to control pollution from storm water runoff. Many communities with populations less than 100,000 are now being permitted and they are preparing plans to improve the quality of their storm water discharge.
- **Agricultural Runoff Control Programs.** Regulatory programs have controlled the runoff of rice herbicides that impacted the Sacramento River drinking water supply for Sacramento and West Sacramento, and selenium that impacted wildlife in the San Joaquin Valley.

II. Initiatives still in the implementation phase

REGULATION

- TMDLs and Water Quality Control Plan amendments are in progress for salt and boron in the San Joaquin River; organo-phosphate pesticides in the San Joaquin River, Delta, and urban creeks; mercury in the Delta and tributaries; and dissolved oxygen in the San Joaquin River near Stockton.
- Waivers for agricultural drainage require technical and monitoring reports by dates certain that are forthcoming. Various agricultural coalition groups will be submitting such reports in order to be covered by the waiver, and an intense effort will be needed to evaluate the information to be submitted.
- Major efforts are in progress to coordinate with local stakeholders on water quality control efforts, through the SWAMP (Surface Water Ambient Monitoring Program), watershed and grant programs.
- General Permits are being prepared for the ~2500 confined animal facilities (mostly dairies) in the Central Valley. The Permits will restrict surface water discharges, expand efforts to protect groundwater, and implement the new USEPA confined animal facility program.
- Waste Discharge Requirements for land disposal of wastewater are being revised to incorporate new studies and protective measures for groundwater.
- NPDES Permits for discharges to surface waters are being modified at their five-year renewals to include new Federal and State toxicity standards. These permits deal with many more constituents than older permits due to expanded effluent and receiving water monitoring that was started a few years ago.

III. New initiatives created by legislation to go into effect on January 1, 2004

- Fees for Waivers. The Board is concerned that use of waivers to regulate large numbers of dischargers (such as irrigated agriculture or timber harvesting) precludes collection of annual fees, so program funding is at risk. SB 923 authorizes annual fees for waivers, so the Board may reconsider recently adopted waivers for inclusion of annual fees.

IV. Unaddressed environmental threats

- Environmental Cleanup Liability. Efforts to investigate or cleanup pollution sites, particularly abandoned mines, can result in liability for full site cleanup by parties attempting to study or reduce existing environmental impacts. State legislative relief has been adopted, but federal legislation is needed to allow willing public agencies to conduct site cleanup work.
- Groundwater salinity. Agricultural irrigation and fertilization, waste disposal, and many other human activities add salt to the groundwater. Some degradation is probably inevitable, but management of salt discharges may prevent loss of use of the groundwater, which is the primary municipal and agricultural water supply in the Central Valley.

California Regional Water Quality Control Board, Lahontan Region (6)

Major Accomplishments 1999-2003

I. Major accomplishments of the last five years

WATER QUALITY

- Leaking UST Sites Cleaned Up —Regional Board-directed actions have resulted in cleaning up 196 leaking underground fuel storage tank sites.
- Leviathan Mine — The Regional Board has treated approximately 21.8 million gallons of acidic mine drainage at Leviathan Mine, a former sulfur mine now owned by the State of California; and as a result of the treatment project, kept approximately 38 tons of aluminum, 1,400 pounds of nickel, and 500 pounds of arsenic from entering waterways of California and Nevada.
- TMDLs — In 2000, the Regional Board created a unit to develop TMDLs to restore impaired waters in the Region, and the Board adopted TMDLs for restoration of Heavenly Valley Creek and Indian Creek Reservoir that address excessive sediments and nutrients, respectively.
- Erosion Control in the Town of Mammoth Lakes — trained local town inspectors and developers in proper control of erosion from construction sites to protect Mammoth Creek from storm induced sediment discharges.
- Negotiated Settlement of Enforcement Action Against Large Chemical Production Facility — allowed the company to reduce pollutant mass loading to the environment by over 50% while maintaining full production, and included added wildlife protective measures.
- Solvent and Perchlorate Cleanup Technologies — worked with Edwards AFB to identify and develop innovative technologies for cleaning up solvents and perchlorate in the groundwater under the base.
- NPDES General Permit — In 2000 the Regional Board adopted a permit for Discharges of Stormwater Runoff Associated with Industrial Activities and Maintenance Dredging at Marinas in the Lake Tahoe Basin.
- Caltrans Deicers and Snow Removal at lake Tahoe — In 1999 the Regional Board staff worked with Caltrans to reduce the amount of salt used for deicing and to halt “slushing” operations on the Lake Tahoe basin highways to keep roadway pollutants out of storm water runoff.
- Memoranda of Understanding (MOU) with the US Forest Service, Lake Tahoe Basin Management Unit (LTBMU) – In 2003, the Regional Board entered into an updated MOU relating to procedures for review of activities conducted on lands administered by the LTBMU, to focus the Regional Board’s time on the large projects in sensitive areas of the Lake Tahoe basin.
- MOU with the Tahoe Regional Planning Agency (TRPA) – In 2003, entered into an updated MOU with TRPA, defining roles and responsibilities in the Lake Tahoe basin to avoid unnecessary duplicative

regulation, placing the Regional Board as primarily responsible for overseeing maintenance dredging, contaminated groundwater sites, and NPDES permit compliance.

- Former George AFB — In 2002 Regional Board oversight of the investigation and remediation of the solvent and jet fuel contamination at the base allowed for the timely re-use of the Air Force property for community development projects.
- Recycled Water Use in San Bernardino Mountains — In 2003 the Regional Board facilitated the safe use of recycled water for incinerator cooling in conjunction with the removal of bark beetle-infested trees in the Lake Arrowhead area of the San Bernardino Mountains.
- Prohibition Lifted — In 2003 the Regional Board adopted a Basin Plan amendment that allows for the reuse of wastewater in the drought stricken San Bernardino Mountain communities.

II. Initiatives still in the implementation phase

- Lake Tahoe — The Regional Board is the agency taking the lead to develop a bi-state TMDL for restoration of Lake Tahoe's famed clarity in conjunction with the Nevada Division of Environmental Protection, the Tahoe Regional Planning Agency, and the US Forest Service; completion is scheduled for 2007.
- MTBE Cleanup in South Lake Tahoe — The Regional Board is directing cleanups at numerous leaking underground storage tank sites in the South Lake Tahoe area where MTBE and other gasoline constituents have affected or threaten the area's water supply.
- Leviathan Mine — In May 2000, the United States Environmental Protection Agency (USEPA) designated Leviathan Mine, which is owned by the State of California, a federal Superfund site. At the USEPA's direction, the Regional Board and another potential responsible party, the Atlantic Richfield Company, are conducting pollution characterization and abatement activities at the site as part of the CERCLA process to develop and implement a permanent cleanup.

III. New initiatives created by legislation to go into effect on January 1, 2004

None currently underway

IV. Unaddressed environmental threats

- Impacts of Atmospheric Deposition on Water Quality/Beneficial Uses – There is a long term trend toward eutrophication of high elevation lakes in the Sierra Nevada (apparently from atmospheric nutrient deposition), pesticides and PCBs have been documented in "pristine" high Sierra waters, and atmospheric deposition is a significant factor in the declining trend in Lake Tahoe's clarity.
- Impacts of Inactive/Abandoned Mines and Ore-Processing Facilities on Water Quality/Beneficial Uses – Thousands of abandoned mines have been identified statewide, and the Lahontan Region has a significant portion of the total; monitoring and remediation are being done for only a few of these mines.

- Polycyclic Aromatic Hydrocarbon (PAH) Contamination in Lake Tahoe — In 2003 it was determined by researchers that PAHs, mostly from watercraft emissions in certain high traffic area “hot spots”, and can be toxic to fish.

California Regional Water Quality Control Board, Colorado River Basin Region (7)

Major Accomplishments 1999-2003

I. Major accomplishments of the last five years

TOTAL MAXIMUM DAILY LOAD (TMDL)

- Alamo River Silt/Sediment TMDL and Implementation Plan adopted and approved, proceeding with implementation.
- New River Pathogen TMDL and Implementation Plan adopted and approved, proceeding with implementation.
- New River Silt/Sediment TMDL and Implementation Plan adopted and approved, proceeding with implementation.

BORDER POLLUTION

- Bi-national infrastructure emergency projects completed, costing approximately \$7.5 million, to mitigate 10-20 million gallons per day of raw sewage spilling in Mexicali, Mexico and flowing into the U.S. via the New River.
- Assisted in Border Environmental Cooperation Commission certification of Mexicali II wastewater treatment plant for the abatement of New River pollution from Mexico.
- Assisted CalEPA in implementing its cooperative agreement with Baja California for Industrial Waste Monitoring and Pretreatment program in Mexicali.
- Contracted funding for certification of wastewater treatment operators working at the Mexicali Wastewater Treatment Plant.
- Adopted two Resolutions requesting the U.S. Federal Government to expedite efforts to address New River pollution.

COLORADO RIVER

- Adopted Resolution requesting U.S. Federal Government to support remedial efforts addressing perchlorate pollution in the lower Colorado River.

WATER QUALITY POLICY

- Adopted Basin Plan amendment prohibiting septic tank discharges in Cove area of Cathedral City, Riverside County.

- Certification of Region's water quality laboratory, supporting TMDL development/implementation and water quality monitoring at the International Boundary.

NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) AND NON CHAPTER 15 WASTE DISCHARGE REQUIREMENTS (WDR)

- Adopted two Regional Board (RB) general orders, 91 NPDES permits, and 191 WDR permits.
- Completed 398 NPDES permit holder inspections and 2599 WDR permit holder inspections.
- Worked with Twentynine Palms Marine Corps base under a Time Schedule Order to implement construction of new treatment facility for Camp Wilson Area.
- Adopted an area-wide municipal storm water permit to protect surface water bodies within the Whitewater Watershed and the underlying ground water basin from pollution associated with urban runoff and other non-point sources.
- Initiated clean ups of numerous sites contaminated with MTBE and/or PCE, which have threatened or impacted municipal water supply wells in the Coachella Valley Basin.

CHAPTER 15 WASTE DISCHARGE REQUIREMENTS

- Adopted waste discharge requirements for two regional landfills that will be constructed by LA Sanitation District--the Mesquite Landfill, located in Imperial County, which will commence landfill development by 2007 and be open to receive waste by the end of 2008, and the Eagle Mountain landfill, which will be the biggest landfill in North America, will be constructed sometime thereafter.

ENFORCEMENT

- Issued Administrative Civil Liability Complaints, including Minimum Mandatory Penalties to wastewater dischargers who violated water quality laws, totaling \$618,445, some of which was applied toward Supplemental Environmental Projects and Compliance Projects.

II. Initiatives still in the implementation phase

TOTAL MAXIMUM DAILY LOAD (TMDL)

- Imperial Valley Drains Silt/ Sediment TMDL in external peer review.
- Salton Sea Nutrient TMDL modeling studies for linkage analysis continuing.
- Coachella Valley Storm Drain Bacterial Indicators DNA studies continuing for TMDL development.
- Palo Verde Outfall Drain Bacterial Indicators TMDL in public review.
- New River Trash TMDL in internal peer review.
- New River Dissolved Oxygen TMDL in implementation plan development.

BORDER POLLUTION

- Continuous involvement with Bi-national Technical Advisory Committee monthly meetings and tours to expedite development of infrastructure projects to improve water quality at International Boundary.
- On-going extensive water quality monitoring at International Boundary.

SALTON SEA

- Collaborating with Federal, State, and Local agencies to address water quality impairments in Salton Sea.
- Representing CalEPA at Salton Sea Science Office monthly meetings.

GRANT MANAGEMENT

- Managing 8 CWA 319(h) grant contracts totaling \$1,400,000 and 6 Proposition 13 grant contracts totaling \$7,150,000 that focus on reducing non-point source pollution.

WATER QUALITY POLICY

- Development of a Basin Plan amendment prohibiting septic tank discharges in Desert Hot Springs, Riverside County.

GROUNDWATER CONTAMINATION/ON-GOING CLEANUPS

- Regulating clean up of Tetrachloroethane contamination affecting two high capacity municipal wells in Palm Springs.
- Expediting action, in coordination with Department of Toxic Substances Control and PG&E, to cleanup Hexavalent Chromium pollution at the Topock Compressor Station.
- Oversight of on-going remediation of a petroleum release at Marine Corps Air Ground Combat Center in Twentynine Palms – Soil Vapor Extraction system has removed ~13,000 lbs of petroleum from the site.
- Oversight of on-going remediation of a petroleum release at JW Marriott Desert Springs Resort in Palm Desert – Soil Vapor Extraction system has removed ~33,000 lbs of petroleum from the site.

III. New initiatives created by legislation to go into effect on January 1, 2004

- Prohibition of septic tanks in Desert Hot Springs basin in response to SB1852.

IV. Unaddressed environmental threats

- Introduction of potential pollutants, namely perchlorate, via groundwater recharge efforts utilizing imported water from the Colorado River.
- Salton Sea salinity continues to increase in the absence of a preferred remediation project.
- Elevated nitrate levels in groundwater, likely due to nitrogen fertilizer application on greenbelts and from failing septic tanks.
- The ground water basin underlying the Coachella Valley, a sole source aquifer, needs comprehensive water quality assessment to determine the effect from non-point source pollution.
- Guidelines for septic tank/leach field systems.

California Regional Water Quality Control Board, Santa Ana Region (8)

Major Accomplishments 1999-2003

I. Major accomplishments of the last five years

WATER QUALITY

- Lockheed Perchlorate and VOC Wellhead Treatment Project – The Regional Board required Lockheed to provide wellhead treatment and alternative water supplies to address VOC and perchlorate contamination in the Redlands-San Bernardino-Riverside area (most recent phases completed 2003).
- General Dairy Permit (1999) – In 1999, the Regional Board adopted a general NPDES permit, under which all of the Region's dairies are regulated, including a requirement for the development of engineered waste management plans for all dairies and the construction of all facilities necessary for these dairies to achieve compliance.
- Municipal Stormwater Permits – The Regional Board has adopted municipal stormwater permits for the portions of Orange, Riverside and San Bernardino Counties within the Santa Ana Region, thus bringing the entire Santa Ana Region under area-wide stormwater permits.
- Sanitary Sewer Overflow (SSO) Regulation – In 2002, to address beach closure issues, the Regional Board adopted a general permit regulating sanitary sewer overflows for all local sewerage jurisdictions in Orange County, addressing all aspects of sanitary sewer system maintenance and operation.
- TMDLs – The Regional Board adopted TMDLs for the Newport Bay Watershed addressing sediments, pathogens, nutrients, chlorpyrifos, and diazinon.
- Orange County Water Quality Management Plan – In 2003, the Regional Board directed a stakeholder process leading to the consensus-based approval of the Water Quality Management Plan for Orange County, addressing stormwater issues related to new development.

II. Initiatives still in the implementation phase

- Nitrogen/Total Dissolved Solids Basin Plan Task Force – The N/TDS Task Force, a stakeholder-funded water quality control plan task force, is nearing the completion of a comprehensive review of groundwater quality, water quality objectives, assimilative capacity, groundwater basin boundaries, and beneficial uses, all leading to the development of major proposed revisions to the Region's water quality control plan.

- TMDLs – The Regional Board continues to develop basin plan amendments adopting implementation plans for previously-adopted Newport Bay TMDLs and is continuing with the development of new TMDLs for Lake Elsinore, Canyon Lake, the Prado Wetlands, and Big Bear Lake.
- Rialto Basin Perchlorate Pollution – The Regional Board has issued 24 enforcement orders related to perchlorate pollution in the Rialto Groundwater Basin and, to date, has secured more than \$10 million for wellhead treatment facilities.
- Beach Closures and Urban Runoff – The Regional Board continues to dedicate significant staff resources to the investigation into the causes of beach closures and coastal water quality impairment related to bacterial and chemical contamination suspected to result from urban runoff and sanitary sewer overflows.

III. New initiatives created by legislation to go into effect on January 1, 2004

None currently underway

IV. Unaddressed environmental threats

- Perchlorate Pollution – In addition to the perchlorate in the Rialto Basin mentioned previously, there are approximately 135 additional wells in the Region that have concentrations of perchlorate in excess of the action level of 4 parts per billion; some of this pollution is thought to be the result of perchlorate contained in water carried into Southern California by the Colorado River Aqueduct and used for landscape and agricultural irrigation since the 1950's.
- Groundwater Pollution by Volatile Organic Compounds (VOCs) – There are a numbers of areas within the Region that are underlain by groundwater polluted by VOCs, the sources of which, due to resource limitations, have not yet been identified, and for which investigations, cleanup and enforcement have not been initiated.
- Agricultural Fertilizer Limitations – As a result of groundwater basins suffering from major long-term adverse salt balances, significant areas within the region have no remaining capacity for the assimilation of pollutants, and it will become increasingly necessary to address these areas of no assimilative capacity by limiting or prohibiting the use of animal manure fertilizers.

California Regional Water Quality Control Board, San Diego Region (9)

Major Accomplishments 1999-2003

I. Major accomplishments of the last five years

WATER QUALITY

- **Ambient monitoring:** In July 2003 - Regional Board issued a request, pursuant to Water Code Section 13225, to the harbor authorities in the San Diego Region, for development of a comprehensive monitoring program for each of the region's harbors.
- **Urban Runoff Monitoring:** During the second half of 2001, Regional Board issued a directive, to the Orange County storm water co-permittees, pursuant to Water Code Section 13267, to conduct comprehensive monitoring within the Aliso Creek Watershed to identify sources of elevated bacteria levels and appropriate control actions.
- **Waivers of Waste Discharge Requirements:** In September 2002, Regional Board adopted a Basin Plan amendment to revise the Board's policy for waivers of waste discharge requirements.
- **NPDES Permits:** In 2003, Regional Board issued new NPDES discharge permits to regulate discharges from the industrial, commercial and residential areas of three U.S. Navy facilities (Point Loma, North Island and 32nd Street Naval Yard) adjacent to San Diego Bay.
- **Stormwater Municipal MS4 Discharge permits:** In January 2001, Regional Board issued precedent setting permit to regulate municipal stormwater discharges in San Diego County. In February 2002 Regional Board adopted a similar MS4 stormwater permit for Orange County stormwater agencies. Municipalities in both counties have made significant progress in abating emissions of pollutants to their stormwater conveyance systems under the new permits.
- **Sewage spills:** During 1999-2003, Regional Board imposed seven administrative civil liability actions (ACLs) and collected \$2,740,000 in penalties for sewage spills resulting in widespread corrective actions by sewage collection agencies and concurrent reductions in sewage spills.
- **USMC Camp Pendleton:** In 2003 achieved compliance with inland surface waters standards for the Santa Margarita River with the termination of the discharges of inadequately treated wastewater.
- **Construction Stormwater:** Since 1999 the Regional Board issued 11 ACLs establishing liability of approx \$ 1.6 million against construction companies and a municipality for failing to provide adequate protection erosion and sediment controls to prevent discharges from entering the waters of the state. Subsequently, the building industry throughout the Region initiated positive corrective actions and now routinely install and maintain Best Management Practices on construction projects that reduce the potential for sediment discharges.
- **Collection of Delinquent Annual Fees:** Since 1999 the Regional Board issued 32 ACLs establishing liability of approx \$24,000 to dischargers that failed to pay annual fees for continued oversight under

waste discharge requirements. By mid-2001 the outstanding fee total for the San Diego Region alone was \$610,000. The Regional Board efforts resulted in an 80% reduction in the outstanding annual fee debt.

- Invasive Species: In September 2002, Regional Board initiatives leading and supporting the Southern California Caulerpa Action Team resulted in the apparent eradication of the invasive algal species *Caulerpa taxifolia* in Agua Hedionda Lagoon.
- Groundwater protection: During 1999-2003, Regional Board closed or concurred with local agency closure of approximately 700 underground storage tank cleanup cases in the San Diego Region.
- Groundwater protection: During 2001-2003, Regional Board expedited cleanup at a known underground storage tank release site, and issued 4 orders to investigate and report on suspected release sites in Santa Ysabel, a rural, groundwater dependant community with an area-wide gasoline pollution problem.
- Groundwater protection: During 2000-2003, Regional Board issued 6 cleanup and abatement orders to gasoline station owners near public water supply wells in the Temecula Valley, requiring soil and groundwater cleanups of MTBE, and worked cooperatively with local governments in an attempt to prevent future siting of high risk facilities in the proximity of the wells.

II. Initiatives still in the implementation phase

- Beach closures: Through 2005, Regional Board development of Total Maximum Daily Load (TMDL) allocations for pathogens in impaired recreational waters.
- Santa Margarita River/Riverside County MS4 Stormwater permit: Reissuance scheduled for April 2004.
- Sediment Cleanup: Through 2004, Regional Board issuance of cleanup orders for contaminated San Diego Bay sediments in the vicinity of the NASSCO and Southwest Marine shipyards.

III. New initiatives created by legislation to go into effect on January 1, 2004

- Senate Bill 68 (Alpert): Under the statute the Regional Board is encouraged to participate in the activities of the San Diego Bay Advisory Committee for Ecological Assessment by the enabling legislation.

IV. Unaddressed environmental threats

- The effectiveness of mitigation projects for wetlands/habitat impacts of new development is not known. The projects are not provided oversight to determine if fully implemented or if effective in compensating for environmental impacts.

- Federal Facilities: Permit violations by federal facilities continue. The United States Marine Corps, Camp Pendleton and the International Boundary and Water Commission's International Wastewater Treatment Plant account for most of the permit violations in the San Diego Region.
- Impacts of nonpoint source waste loads (agricultural irrigation, landscape irrigation) on underlying groundwaters are not being addressed.